



The MODERN HOSPITAL

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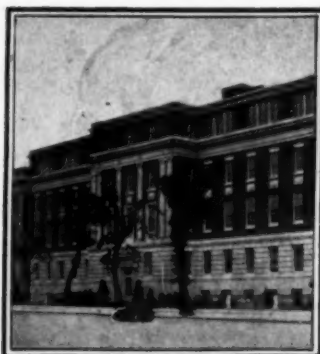
January, 1928

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Queen of Los Angeles Hospital
Los Angeles, Cal.



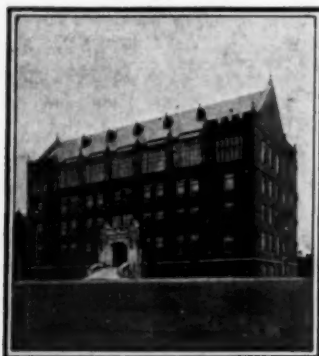
Samaritan Hospital
Philadelphia, Penna.



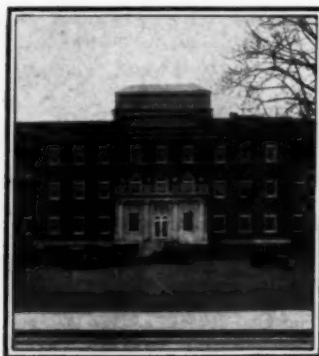
Henry Ford Hospital
Detroit, Mich.



Princeton Infirmary
Princeton, N. J.



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THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment and Administration of Hospitals, Sanatoriums and Allied Institutions, and to Their Medical, Surgical and Nursing Services

Vol. XXX

January, 1928

No. 1

The Drift Toward Hospital Amalgamation

By S. S. GOLDWATER, M.D.

Director, Mount Sinai Hospital, New York

A BIRD'S-EYE view of the hospital field discloses the fact that in the hope of raising hospital efficiency, municipalities, community chests, and independent hospitals are now giving a great deal of attention to schemes of coordination or amalgamation.

Such schemes are afoot in London, where thoughtful administrators are weighing the advantages to be derived from the combined administration of relatively popular voluntary hospitals and somewhat less esteemed poor law infirmaries; in New York, where the consolidation of three independent municipal hospital systems, at present directed by a department of health, a department of public welfare, and a board of hospital trustees, has been advocated by the mayor; in a dozen cities in the United States, Great Britain and Australia, where groups of hospitals have been or are about to be correlated, primarily in the interest of medical education; in Philadelphia, where an independent dispensary has recently been absorbed by a famous general hospital, and where three pairs of hospitals are negotiating mergers; in Western Pennsylvania and in a number of localities in the Middle West, where neighboring towns and villages are combining their resources in the interest of hospital betterment; in Washington, D. C., Montreal, Que., Portland, Me., and elsewhere. The present discussion is prompted by the current drift toward amalgamation.

The United States prides itself on its efficiency in organization and management (not that our

management of public affairs is much to boast of), and coordination and amalgamation are words to conjure with. Coordination suggests a more perfect adaptation of means to ends, while amalgamation arouses visions of large scale organization, of reduced overhead, of increased profits where industry is concerned, and of equivalent advantages in nonprofit-making schemes of social or community organization.

Hospital amalgamation may be prompted by the hope of individual aggrandizement, as in the case of any large organization that seeks to devour a smaller one. Indeed, hospital amalgamations have been proposed, in some cases, without much regard for the fundamentals of sound hospital administration. But reference to the broader interests of the community is really the only satisfactory method of testing the merits of schemes of this character, and it is therefore pertinent to ask just what these community interests are.

When and How to Amalgamate?

A wide-awake community requires of its hospital or hospitals at least three things; efficient medical service, economy in construction and administration and a reasonable measure of comfort and convenience for patients and their friends.

Efficient medical service in a hospital depends upon two factors, namely, the talent and character of the medical staff, and staff organization (adequate technical equipment is, of course, indispensable, but it is assumed that this will be furnished in any case). As to native capacity and

personal character, a hospital must take what the gods grant; men of exceptional talent and extraordinary moral worth may be shifted about from hospital to hospital, but they cannot be conjured into existence out of an empty void. The actual problem of the hospital administrator is to make the best possible use of such talent as may be available.

Intimate contact with the affairs of nearly two hundred hospitals over a period of twenty years has led me to conclude that medical talent thrives best in a general hospital fully equipped and comprehensively organized. By general hospital I mean a hospital that is equipped adequately for the diagnosis and treatment of all varieties of acute disease; in other words, a hospital that recognizes and provides for all of the recognized specialties, as well as for general surgery and internal medicine. The equipment of the hospital must be sufficient to satisfy the technical needs of all of the clinical groups included in the organization. Moreover, it will be in the interest of all the patients of the hospital to conserve the time and strength of the staff by bringing the various departments into close physical relationship, for the purpose of facilitating consultative or group practice, which is the keynote of modern medical practice. A hospital may have a scattered arrangement and still be a general hospital according to the terms of the definition, but if its clinical units are so dispersed as to make the joint bedside visits of its associated clinicians particularly difficult, the medical efficiency of the hospital must be impaired.

Coordinated Hospital Services

In a fully developed general hospital, the departments to be grouped together include not alone the clinical departments for in- and out-patients, but the scientific or diagnostic departments and the research departments as well. It is only when the right administrative and physical relations are established that medicine can put forth its full strength and can confer upon the sick all of the benefits of which it is theoretically capable. These conditions established, the hospital is in a favorable position to carry on its important secondary functions of research and teaching. All of which means, of course, that the amalgamation of general medicine and surgery with the so-called clinical and laboratory specialties is theoretically a sound procedure, which may serve as a guide to hospitals of limited clinical scope that are contemplating amalgamation. The aim is to piece together into a smoothly functioning whole, fragmentary clinical organizations which may be qualified to treat appropriately cer-

tain diseases but are hardly prepared to treat adequately the patients themselves.

If to the clinical organization of public wards on the comprehensive lines here indicated there be added accommodations for private and semi-private patients, in sufficient numbers to meet the requirements of the clinicians who serve the hospital gratuitously in its public wards, so that the entire institutional practice of the staff can be carried on at a single place, the time and strength of the staff will be conserved to the advantage of all the hospital's patients, rich and poor alike. The amalgamation of public and private, or of charitable and noncharitable hospital services, represents a second form of hospital amalgamation which is accepted without question in the United States and Canada, but which in England is still the subject of debate, although the drift of well informed opinion in that country is toward the tried and approved American and Canadian practice.

Hospitals May Be Too Large

There is a point at which the expansion of any hospital, or that of its separate clinical departments, may wisely be arrested. Individual clinical departments in a general hospital for acute diseases should not be too large, for several reasons. In the first place, the head of each clinical service should maintain actual contact with all of the patients intrusted to his care. Is not this precisely what any one of us, if a ward patient, would want? Who would be content to be treated by a subordinate member of the staff, knowing all the while that the chief of staff, presumably possessing greater knowledge and skill, was close at hand? Secondly, overdeveloped clinical services, which are found in hospitals of excessive size, tend to create a monopoly of hospital privileges which is disadvantageous to the medical profession and to the community at large, in that it unnecessarily deprives worthy physicians of the use of resources that are essential to their progressive development, both as practitioners and investigators; and obviously, any loss of knowledge or skill on the part of a physician is eventually passed on to the sick in the form of unsuitable or inadequate treatment. It is the patient who pays in the end—pays dearly with his health, or even with his very life.

Ample experience has shown that hospitals of from 500 to 600 beds can be satisfactorily supervised and controlled, and that administrative difficulties are multiplied when the size of a hospital greatly exceeds these figures. If, within the limits named, all of the requirements of an efficient medical service can be satisfied, and if,

moreover, overhead expense in all important departments, including the laboratory, kitchen, laundry and power plant, can, in a hospital of 600 beds, be kept down to a minimum, amalgamations that aim at the consolidation of 1500, 2000 or 3000 beds in a single institution should be viewed with suspicion. It is my belief that physical consolidations of such magnitude cannot be successfully defended, whether on grounds of medical efficiency, economy of construction, cost of equipment, economy of maintenance, the comfort of patients, or the satisfaction of visitors. However the duplication of hospitals is distinctly harmful when overhead is increased, or when contacts and correlations that are desirable from a service standpoint are obstructed or destroyed.

Thus very small hospitals are a most undesirable way of meeting the requirements of a large community, because hospitals of small size cannot be adequately staffed or, without burdensome overhead, adequately equipped to meet the exacting demands of modern medicine. What is true in this sense of a very small hospital is, as a rule, equally true of a dispensary which is not part of a general hospital organization, and hospital and dispensary amalgamations should, therefore, generally be looked upon with favor.

Conditions Unfavorable to Amalgamation

While, as a rule, the union of smaller institutions that are lacking in essential departments is desirable, this may not be wise in every case. For example, there may exist in a community of moderate size two hospitals that are so distinct in origin, tradition, religious affiliation, type of service or community relations, that their enforced union would plunge the proposed amalgamated institution into difficulties which would more than offset the promise of enhanced medical efficiency or the prospect of reduced maintenance costs. Particularly if the community is a growing one, which in a reasonable period may be expected to develop and support two complete general hospitals, it may be wise to keep hands off and to allow existing institutions time to outgrow their defects.

An equally strong reason against the consolidation of small hospitals which are defective in clinical organization and which lack the most economical types of plant and equipment, exists where two or more such hospitals serve widely scattered communities, for it requires a certain concentration of population and considerable wealth to support a full-fledged general hospital. A rural community can no more support a large and perfect hospital than it can maintain a first-class opera house. The small town is obliged to

content itself with the visiting opera company, while the still smaller village may be compelled to get its music by means of the radio or gramophone. Similarly, dwellers in sparsely settled regions must be content with the visiting consultant or specialist, or with the best imitation of their services that the local family doctor can offer. While the imitation may be fairly good, no one will deny the superiority of the genuine article, and if the nature and requirements of an efficient medical service are understood, small communities that are not too far apart will make every effort to pool their hospital resources.

Rural hospitals which are unable to combine physically may nevertheless cooperate with each other in useful ways. Thus a single competent pathologist, whose exclusive service a small hospital cannot afford, may take charge of the laboratory work of several hospitals; or clinical material may be apportioned by agreement among several hospitals in such a way as to discourage undesirable duplication of plant and equipment. Affiliations may be formed in the interest of better nursing education; such affiliations, first undertaken voluntarily by groups of hospitals in many states, have been multiplied enormously in recent years by the compulsion of educational laws or regulations.

A form of hospital consolidation which is rare in the United States, but which is prevalent in Germany and in countries that derive their medical standards and practice from Germany, is the linking together of a general hospital and a hospital for infectious diseases. In New York, infectious disease hospitals are separate institutions, yet the health department of the City of New York requires every general hospital to provide some space, however limited, for the care of patients suffering from communicable diseases. The purpose of the New York code is not to encourage general hospitals to compete with the city's own hospitals for infectious diseases, but to meet the needs of patients, originally admitted to general hospitals, whose transfer to a municipal hospital for contagious diseases might be unduly hazardous. Curiously enough, the assumption of the New York code that it is feasible and in special circumstances desirable, due precautions being taken, to house an infectious case in a general hospital, is not endorsed by the sanitary authorities of Philadelphia, who discourage general hospitals from caring for patients suffering from contagious diseases. One wonders how many sanitarians in the United States would vote to uphold the New York rather than the Philadelphia policy if the question were put to them today.

If it is possible for university hospitals to maintain contagious wards (as a number of such institutions in the United States actually do), it seems equally possible for well conducted and suitably planned nonteaching hospitals to do the same. One need not travel far to find a community in which the creation of infectious wards, suitable for paying as well as nonpaying patients, would solve one of the most difficult problems encountered in medical practice. A thorough airing of this question among the medical profession, and the subsequent enlightenment of the lay public as to the facts and their significance, might lead to a better coordination of general hospitals with hospitals for contagious diseases, if not, indeed, to actual amalgamations which in the present state of public opinion are impracticable.

The carefully planned coordination of acute and chronic hospital services is most desirable but is rare, even in connection with municipal hospital systems. Municipal hospitals, as a rule, admit chronic patients because no one else cares to do so. In a few of the larger cities, where municipalities support a number of hospitals, separate institutions for acute and chronic cases may be found. More frequently the two types of cases are cared for not only in different parts of the same hospital, which is relatively consistent with sound administration, but in the same wards, a practice to which serious objections may be made.

The Value of Hospital Autonomy

It is now generally agreed that every general hospital should make some provision for at least the temporary care of cases of tuberculosis. A close working agreement between a general municipal hospital and a municipal tuberculosis hospital (where one exists) in the same community, is so obviously necessary as to suggest the advisability of unified control of the two institutions. However, a satisfactory understanding between a hospital commission in charge of general hospital work and a health department in charge of hospitals for communicable diseases (tuberculosis included) is by no means unthinkable. In communities in which all health and hospital work is in the hands of health departments, the question becomes one of internal departmental administration.

In cities of moderate size, consolidated management seems to be the simplest method of handling the matter. In very large communities, however, the management of many large institutions from a central office may result disastrously, unless each institution belonging to the system is granted a large measure of local autonomy with respect to its internal affairs. The prob-

lem here is the familiar one of the maintenance of the individuality of an institution, the stimulation of local pride, the encouragement of healthy rivalry, the development of a keen sense of responsibility, and especially the fostering of warm personal devotion, without which the morale of an institution is speedily impaired. Nothing is so likely to lower the tone of a hospital as to lodge responsibility for its administration in the hands of absentee officials, who have no intimate contact with its work or with its officiating personnel.

Need of a Community Program

In recommending autonomy for individual hospitals, I should like to be understood as referring more especially to the management of the hospital's internal affairs. There are many ways in which the efficiency of a hospital in a large city may be increased by a coordination of its efforts with those of its neighbors. There is not a large city in the country which has not felt the need of a comprehensive community hospital policy and program, but such a program may, in theory at least, be worked out by voluntary cooperation as well as under unified control.

Economic motives have probably been more potent than the desire to achieve medical efficiency, in bringing about hospital affiliations of limited scope. It is in this spirit that hospitals have organized central purchasing agencies, and have created or supported central schools for the preliminary training of probationers. Familiar forms of cooperation limited to special phases of hospital activity are the formation of permanent or temporary associations for joint fund raising, and the establishment of bureaus of information for the collection of facts of general interest.

There appears, finally, to be a legitimate field for hospital amalgamation as well as for the coordination of the services of separately conducted hospitals. A distinction must be made between the physical amalgamation of hospital plants and mere centralized control. So far as general hospitals for acute diseases are concerned, the character of the ideal hospital unit is logically derived from the hospital's inner needs, and remains the same, wherever control may happen to be lodged. The duplication of medically efficient and physically economical units is perfectly sound practice, and should not be discouraged by central hospital authorities, nor should healthy rivalry among properly organized hospital units forming part of a single system be suppressed. Central management can prevent harmful competition for funds, and can discourage distorted or unilateral hospital growth.



A Bit of America in Europe

By JOHN LARKIN, Jr.

New York.

THE American Hospital of Paris has often been called a bit of America in Europe. It is truly this since it is an American hospital transplanted, with every service and piece of equipment to be found in the leading institutions of the United States.

One hears now and then the query: "Why an American Hospital in Europe?"

In America hospitals are patronized by all classes of people, the rich man and the poor man. In Europe this is not the case. People who can pay for medical and surgical treatment do not look to general hospitals for service but go to private nursing homes or clinics where the rates are high and the service usually limited to the treatment of particular cases. The American Hospital of Paris is the one general hospital in all Europe where medical or surgical care can be obtained according to the best American hospital standards.

This institution stands ever ready to serve the hundreds of thousands of Americans who visit Europe each year, or who live there permanently. Its greatest field of service lies among the American students living in Paris, the tourists and the men and women who travel abroad on business.

The hospital is in the beautiful park of Neuilly-sur-Seine, about twenty minutes ride from the heart of Paris. It is considered to be the most complete medical and surgical unit in all Europe.

Its very existence has removed that instinctive dread of being ill, alone, in a hotel or pension, dependent upon the advice and care of people who speak a different language.

This hospital was built and equipped at a cost of \$1,000,000. The fact that building materials and labor are not as costly in Europe as in America permitted the use of the finest brick, steel and cement, which is seldom to be found in European hospitals.

The money that built the hospital and supports it was subscribed solely by Americans living in Paris or visiting Europe. Four campaigns for funds were heavily oversubscribed and provided a total of about \$1,250,000. These efforts were made in 1923, 1924, 1925 and 1927. The campaign for \$300,000, carried on in Paris in June of last year, resulted in nearly \$325,000.

The American abroad should realize the great need for hospital facilities such as he is used to at home, and should regard subscriptions to an American hospital in Europe as a sound business investment—as insurance for the protection of his family and himself. The American Hospital of Paris has become a model studied by all European authorities on hospitalization. Soon new hospitals will be built in England and France along the lines of this institution which protects the life and health of the American colony in Paris.

The new building of the American Hospital is a

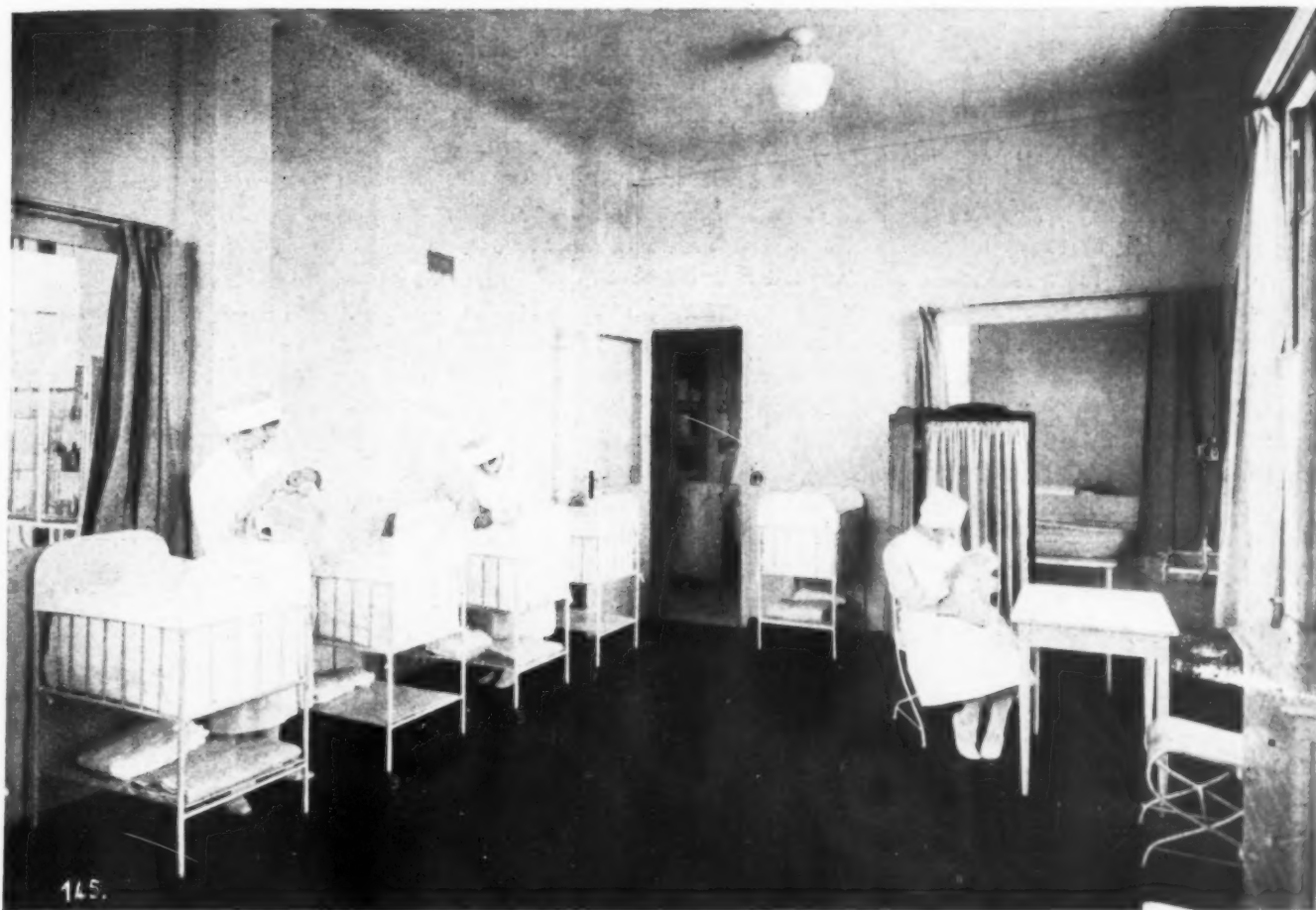


Above, a view over Paris from one of the sun porches. The roofs of the two wings are decorated terraces used by patients who are getting well.

Beautiful gardens and the park of Neuilly surround the hospital and may be viewed by the patients, as every room is an outside room.

memorial to American men and women who served in the Great War. The Hon. Myron T. Herrick, American ambassador to France, has called it "a living memorial, not only to the glorious past but for a useful future commemorating sentiment and utility, more enduring than marble or bronze."

The history of this American institution has been one of steady, vigorous growth. From twenty beds in 1910, it has grown to the 120 beds in the new memorial building. In the first year of the new building's operation, the number of patients cared for was double that of the preceding year. But the original hospital, small as it was, was recog-



nized by European physicians and surgeons as a model of its kind.

During the war this hospital organized and conducted the American Ambulance, the American Field and Paris Ambulance Services and the American Military Hospital at Juilly. After the United States entered the conflict, the American Ambulance was turned over to our army, fully equipped, and became known as American Military Hospital No. 1.

In the years that followed the war, the demands made upon this hospital, which exists only for the service of Americans, became so great that the board of managers decided to build a larger unit. Substantial gifts and the

On the fourth floor are the maternity wards, well removed from the delivery room. Above is shown the nursery. The nurses are largely American.

The picture on the right shows the imposing archway at the entrance to the hospital grounds, constructed of reinforced concrete and brick.



unexpended balance of the American Ambulance Fund, which was used to create in the new structure the Robert Bacon Memorial Wards, made it possible to plan the present building in 1921, and construction was started in 1923, after the first campaign was brought to a highly successful close. On January 31, 1926, the memorial building was opened to the public.

This building is constructed of reinforced concrete and brick with a stone facing. It consists of two wings of five stories each, extending from a central building of similar height. Charming gardens and the beautiful park of Neuilly surround it.

Every room is an outside room. And the wings are so arranged that each room is filled with sunshine during part of the day. The American or "guillotine" type of windows permits proper ventilation, in conjunction with an automatic apparatus which regulates the temperature of each room at all hours.

There are two sun porches for private patients and one for ward patients on each floor. The roofs of the two wings are decorated terraces used by convalescents.

On the first floor of the hospital are the administration offices, the out-patient department and the isolation wards for contagious diseases. The radiology unit occupies a section of one wing on the first floor and the basement, where it is conveniently connected with the radiotherapy and hydrotherapy units. The basement also holds the

power plant, one of the most modern in France, and the main diet kitchen.

From the second to the fourth floors are the 120 beds of this institution, seventy of which are in private rooms. On the fourth floor are the maternity wards well removed from the delivery room. Two labor chambers adjoin this room. The dental surgery clinic is on the third floor and is completely equipped for the diagnosis of dental ailments and faulty physical conditions that might be caused by dental diseases.

There are two operating rooms on the fifth floor. A sterilizing chamber is between them. An anesthetizing room adjoins each operating room.

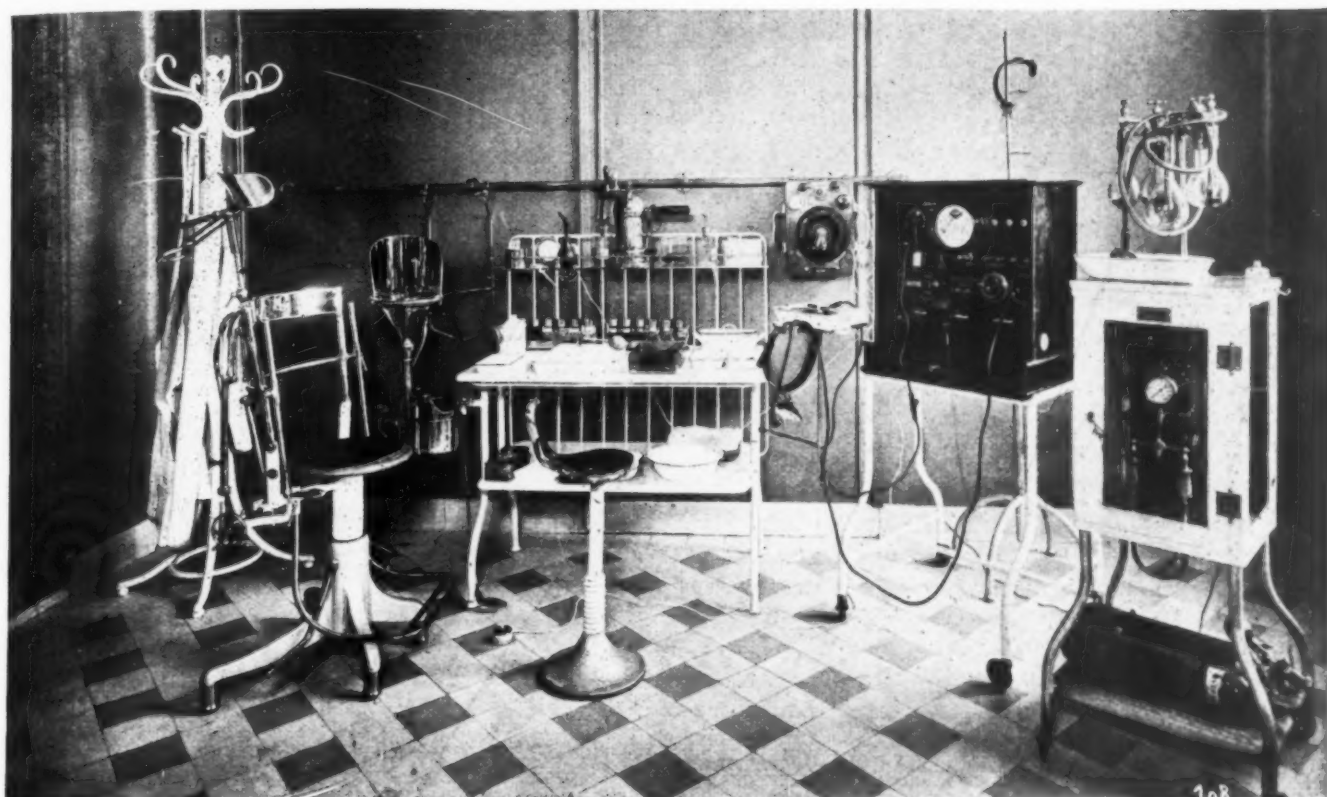
The personnel of the hospital is housed in an adjoining modern building, in which are also the laundry and repair rooms. The nurses are still inadequately housed. They occupy the old residence, built during the war, and the old hospital, built long before the war. A new school of nursing residence, for which funds were raised in the last campaign, is being planned.

The staff is composed of English speaking doctors and nurses. The nurses represent graduates from American hospitals and those trained in the institution's own school.

The medical work of the hospital is supervised by a medical board, composed of five American and three French doctors—Dr. Edmund L. Gros, chairman, Dr. G. M. Converse, Dr. P. F. Armand-Delille, Dr. Thierry de Martel, Dr. Charles Bove, Dr. Alexander Bruno, Dr. G. Bouffe de Saint



Here is shown the large kitchen and some of its modern equipment



*Above is shown
the nose and
throat surgery.*

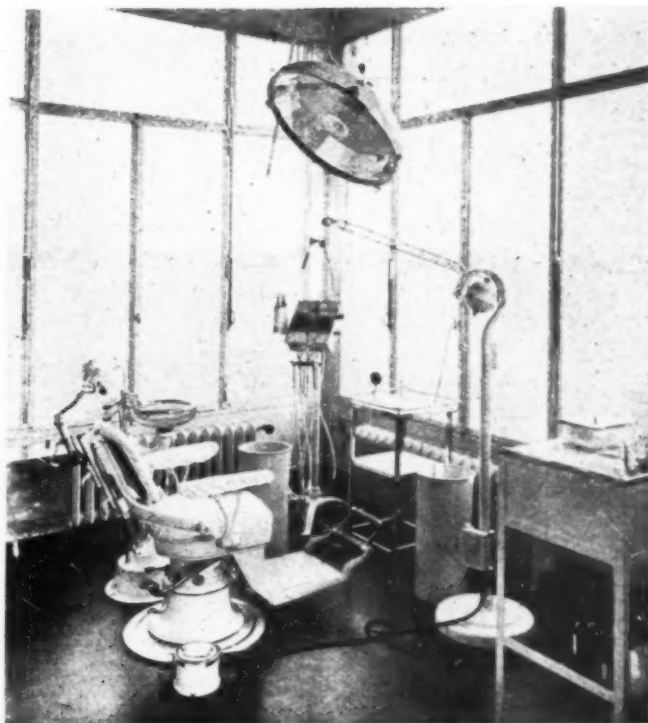
*Left, a corner
in the modern
dental clinic.*

Blaise and Dr. Harry Plotz.

The work of this board is augmented by a consulting staff of eminent European specialists and more than 200 well known practitioners who compose the courtesy list, giving to patients the widest possible choice of physicians. The hospital has also inaugurated a service that gives medical advice, and it recommends listed physicians to Americans in any part of Europe, who need advice.

About thirty prominent physicians and surgeons in America constitute a medical advisory board, of which Dr. C. C. Burlingame, New York, is the chairman. This body is in constant cooperation with the hospital, and one of its outstanding services is to obtain for it as interns, the best men of the leading American medical schools.

About 40 per cent of the patients treated at the hospital are able to pay little or nothing. Because



of this service to needy Americans, the hospital relies upon public subscription for support. At no time can the American Hospital of Paris be operated for profit, according to the terms of its charter, granted in 1913 by the United States Congress.

An idea of the growth in service of the new memorial building may be gained when it is stated that the number of patients treated in 1925, was 813 and in 1926, 1,626; the number of out-patients in

1925; 2,617, and in 1926, 5,300.

Eighty babies were born at the hospital in 1926.

This hospital is a haven of refuge and security for all Americans who fall ill or require surgical care in Europe. In construction and equipment it is the last word in modern American hospital provision, and its management deserves the sympathetic cooperation of all Americans who live in Europe or who travel there.

How We Use Volunteer Aids at Rochester General Hospital*

TO MAKE clear the work done by the volunteers at Rochester General Hospital, Rochester, N. Y., it is necessary to review the history of the hospital, so that you may see the background of this work.

In 1887 the hospital had need of assistance and a group called Twigs was organized, the first unit being called the Parent Stem. Its purpose was to make and provide the linen needed for the hospital. Since that time other groups have been added until now we have thirty-four branches, with 450 members. Before the formation of the community chest the members of these groups raised the charity fund by means of a yearly donation. They have done many other things for the hospital, making gifts and meeting emergencies. All through the years they have raised the fund for free work, supplied the needed linen and kept alive a wonderful spirit of service.

In the year that the hospital was shorthanded on account of many of its personnel being engaged in war duty, the superintendent asked the Twigs for volunteers who would be willing to give half-day service. The response was immediate and gratifying, and so our present aid service came into being.

The Twig organization is now a separate entity and does all the sewing for the hospital, the hospital supplying the material. This group does many pleasant things for the hospital, such as cooperating with the social service department to make the Christmas holiday a real festival by providing gifts and favors. The members meet regularly every other Friday from October to June.

Work Done By Chief Aid

Little by little the aid service added workers, increased the scope of its work, appointed a definite head and eventually became a real department of the hospital. The chief aid gives much time to the work, enlisting volunteers from different groups of laywomen with whom she comes in contact, adjusting difficult situations that arise in the hospital and perfecting the understanding between the aids and hospital groups—doctors, nurses and executives. She is a member of the social service committee and a member of the

women's board. The superintendent of nurses has her talk to the incoming groups of probationers, describing the function and ideals of the service group. Occasionally she meets with the supervisors, to receive suggestions or to make them, so that all may work together to the better advantage of the whole hospital.

Now there are six groups—hostess; x-ray; messenger, with three divisions; library, with two divisions; clinic with two divisions, and dispensary registrar. Each department has a director and these directors form the aid council which has meetings at intervals. There is one annual meeting of the whole group, which last year took the form of a luncheon meeting, in the assembly room of the hospital. Reports were presented and an address was given by the medical director of the hospital.

The aids are a part of the hospital social service department and are under its director, but function directly under the department to which they are assigned.

Uniforms Are Worn

The question of a uniform for the aids was an early difficulty, but it is now adjusted to the satisfaction of the workers and of the hospital. Blue was the color chosen, as it suggested cheer. The hospital buys the material and so owns the uniforms. Each aid pays a uniform-maker to make a uniform to fit her. There are substitute uniforms in all sizes, and until an aid sees how she likes her work and whether she wishes to become a permanent member of the group, she wears the substitute gown. The cuff links and cuffs (regulation linen cuffs) are furnished from a fund controlled by the women's board. The aids make the organdie caps and the collars.

The laundry work is done in the hospital laundry. Each woman gives a half-day service and her uniform, with occasional pressing, needs to be laundered six times a year to keep it looking well. The cuffs are sent to the steam laundry and each aid pays for that service.

The success of the aids at the Rochester General Hospital results from the fact that a clear-cut idea of their true function has been established—that of giving the hospital unprofessional, human

*Compiled by the aid council of the Rochester General Hospital, Rochester, N. Y., Mrs. W. H. Baker, chairman.

service on a part-time basis. There is a pledge on the front page of the register that reads, "Service to Hospital and Community."

We recognize the need of prompt and regular attendance, of courtesy and alertness, of attention to dress, manner, deportment, and a strict observance of such professional ethics as may from time to time be expounded to us.

The following is the outline of our volunteer aid service, which is suited to the hospital it serves. It is by no means a standard for other hospitals but it may help others in working out a plan to fill their special needs. The outlines as given below were submitted by the head aids of the various departments.

Clinical Aids

The aid service in the out-patient department is divided into two sections, the surgical and medical division and another division arranged as follows:

Clinic	Functional Half Days per Week
Ear, Nose and Throat	Two
Eye	Three
Prenatal	One
Orthopedic	Three
Well Baby	One
Neurological	One
Asthma	One
Surgical Chest	One
Venereal Disease	Four

One aid is detailed to each clinic with the exception of the orthopedic, which has a desk aid and a messenger aid.

Each clinic has a desk aid, whose duty is to keep the charts in order, list patients in rotation, make appointments for return visits and take notes for the doctors. In the prenatal clinic the aid notifies all broken appointment cases when to return. Two notices are sent on postcards, one week apart. If the third appointment is broken the patient's appointment card is taken to the social service office, and a public health nurse is sent to learn the condition of the patient and the reason for his absence. A report is then made back to the hospital social service department. The Public Health Nursing Association does all the home visiting for the prenatal and postnatal clinics, as there is no worker in the social service department for this work.

The messenger aid in the orthopedic clinic has to see that all x-ray plates and reports for appointment cases are on the doctor's desk, take patients to and from the x-ray department and do necessary errands.

The aid in the venereal disease clinic routes the

patients to the proper doctor by a system of numbers. The numbers start at sixty and go down from sixty for certain treatments and up from sixty for other treatments. It is the business of the aid to keep in her mind which patients are which, and to take the correct patients and charts to the doctor in the room to which they are meant to go. These clinics average from seventy-five to one hundred patients per day. There are four day clinics and two night clinics, making six per week. The clinics average about two hours in length.

In the medical and surgical division there are regular aids for each clinic. A substitute is employed only when it is impossible for the regular aid to attend. Twenty-four hours' advance notice of absence is required when possible.

The procedure for introducing new aids to their duties is as follows: They are taken on a tour of the hospital so that they may be familiar with the location of any department to which they may be sent. A new aid is always sent to a clinic with an old aid the first time, and every detail of that clinic and the work done in it is explained carefully, so that the new aid is ready to assume her duties alone. This is also done for substitutes. No aid is sent as a substitute to any clinic unless she has been trained for that clinic first.

There is a regulation uniform for the aids—caps, cuffs and rubber heels, and as nearly as possible aids must comply with the nursing ethical rules. Each aid is given her instructions before taking up her duties.

Punctuality and strict attention to work is a hard and fast rule in the clinics. It may be interesting to note that it is the exception rather than the rule that an aid is late or that a substitute is needed.

There are fourteen regular aids in this division and the average number of available substitutes for each clinic is four.

Limitations of space prevent a detailed description of the duties of the aids in all the different divisions, but the following examples give a general idea of the work of this volunteer service.

Medical Aids

Report daily at 8:45 a. m. Object: To make patients comfortable and to carry out doctor's orders.

Appointment Records:

1. Send a list of all appointments for the following day down on the slide.
2. Divide records according to doctors, and pile them in rotation according to appointment time.
3. Stamp with date and "Medical Clinic."

4. New Cases (Those who have never been in medical or chest clinics before). Write on records: (a) Weight, (b) Normal Weight, (c) Height, (d) Temperature, (e) Pulse.

5. Old Cases (Those who have had normal weight and height recorded). Write on record (a.) weight, (b.) temperature.

6. Make certain that all orders have been carried out and any results of tests—Wassermann, urinalysis, x-ray, pathological—are typed on the record or are clipped to the record. If these reports are not back, call down the slide for them. If the reports cannot be obtained from the office tell the social service worker.

General Directors:

1. Keep lists of patients' names and numbers for each clinic. For medical clinic keep list with columns under the following headings: number, name, new or old patient, appointment, doctor's name.

2. Get white card from all patients for clinics: medical, neurological, chest, diabetic, asthma, eye, skin and thyroid.

3. Give patients, who have old gray appointment cards, new yellow ones in place of the old ones. Then destroy the old gray cards.

4. Refer and transfer slips to other clinics should be made out in duplicate. Be sure to put the date and time of the appointment on the slips, first determining appointments available for the appointment clinics and being sure they are noted in the appointment clinic's books. Give one slip to patient and keep one to be used for reference purposes.

5. X-ray slips should be made out in duplicate by the doctors, and both slips should go down to the office with the patients.

6. Answer buzzer. Pull down slide for records. Be sure to send slide down again, otherwise it cannot be reached from below.

7. Be sure to see that all new patients see the social service worker before they leave the clinic, after they have seen the doctor.

8. Obtain patient's record from doctor's office, so that before patient leaves you are certain that he has all directions that the doctor has ordered for him, and that he understands them and will be able to carry them out.

9. Each doctor will see seven old patients, (patients who have been to medical clinic before), and three new patients. If more come, this matter should be referred to the social service worker.

10. If the patient comes on the wrong day, that is, if some doctor on another day has been treating her, please show record to the social service worker.

Before the Clinic:

1. Send patients down the hall to wait on the benches so that the nurse may remain in the clinics.

2. Send patients with no appointments in the appointment clinics, to the special clinics' social service worker.

Appointment Books:

1. Write these up after clinic as follows: (a) Names and numbers written of all patients seen. (b) Check names of appointment cases who came. (c) Write up summary.

At End of Clinics:

1. Leave records of patients seen in order, according to the way they came in.

2. Obtain without fail, the list of broken appointments to be followed up, before the doctors leave.

3. Make appointments for each case to be followed and leave a list of these appointments giving: (a.) name, (b.) address, (c.) number, (d.) date of appointment for each patient.

Messenger Aids

The messenger aid, as the name implies, is a messenger for the information service worker and the executive office of the hospital. It is her duty to be thoroughly familiar with all parts of the hospital, familiar with the names, occupation and offices of all executives, heads of departments and supervisors, familiar with all rules of the hospital and in so far as she is able to be, familiar with the names of the doctors on the staff and the days assigned for the various clinics. Knowledge of these matters and an ever pleasant and gracious manner make the aid an invaluable asset to the hospital.

The messenger aid service is closely linked with the information desk, where two information service workers are maintained by the social service department.

The service is divided into two divisions, with a head aid and substitutes for each division. A register is kept in the information desk, where each aid is asked to register in and out on her day of service.

Library Aids

The library in the Rochester General Hospital is a branch of the Rochester Public Library, but only a small proportion of the approximately fourteen hundred volumes are furnished by that organization.

Most of the books are given by friends and a large number are supplied by the Seventh Twig, in memory of one of their number who died several years ago.

We have five trucks upon which books are taken to the bedside of patients in the wards and in the private rooms. Books are distributed also to nurses, house doctors, orderlies and other helpers. There are three library days, Monday, Wednesday and Friday. About twenty aids are engaged in the work. Most of them come only once a week, some come twice a week, and some are regular substitutes. Each day five aids are engaged in distributing the books and at least two are busy in the library, re-covering with fresh paper books that have been returned, sorting, mending and arranging. Fiction is covered with pretty pink paper as also are juvenile books, non-fiction with tan paper and foreign books are covered in red.

The library includes books in English, Italian, French, German, Jewish, Russian, Ukranian, Lithuanian, Polish and Greek. When books in other languages are called for we borrow them.

Teaching Patients What to Read

Our aim is to do a piece of educational work by persuading patients to read fiction that has stood the test of time—biography, history, travel, poetry and drama. We find that they like good books better than ephemeral fiction after they have been induced to try them. Their thoughts are turned away from their illnesses and occupied with reading that gives them food for reflection and stimulates their imagination.

How the Trustee May Serve the Hospital

The trustee should become familiar with what his hospital offers to the community and what sort of service the community needs, according to Ingersoll Bowditch, trustee of Faulkner Hospital, Jamaica Plain, Mass., who gave an interesting talk at the recent meeting of the New England Hospital Association on "How to Interest Trustees in Their Own Hospitals." "The trustees should visit other hospitals and find out what they are doing for their communities. Frequently he should visit his hospital and spend some time looking it over with the superintendent or head nurse, with the idea of finding out for himself if the equipment is up-to-date and the patients are being given every chance to get well. A talk with patients will bring out facts he never thought of, and often a small change in the methods used or additional equipment bought at a small expense will make a great difference in the attitude of the patient towards the hospital. All good superintendents welcome constructive criticism and are glad of the chance to make their trustees familiar with the work they are doing.

"Trustees should not expect the president of the board to do all the work. They should share with him the responsibilities and take interest in that part of the work for which they are especially fitted. They should be kept busy in order that they may become interested. I know of one trustee, mechanically inclined, who spends

a great deal of time on devices necessary in orthopedic work. Another trustee looks after the repairs to the buildings and is a great help on questions concerning the heating plant and apparatus connected with it. I am especially interested in the human side of hospital work and like to feel that the patients have their personal needs looked after. For the Faulkner Hospital I have obtained subscriptions to magazines which are loaned to the patients. A lending library has been established, from which new books are furnished for two cents a day, and the proceeds used to buy other books. When these books get slightly worn they are added to the free library. Cards are supplied, so that convalescents may pass the time playing solitaire or other card games. Picture puzzles and dissected maps are provided for the amusement of children. With these diversifications the patients have less time to think of their physical discomforts."

How to Impress Values on Members of the Hospital Family

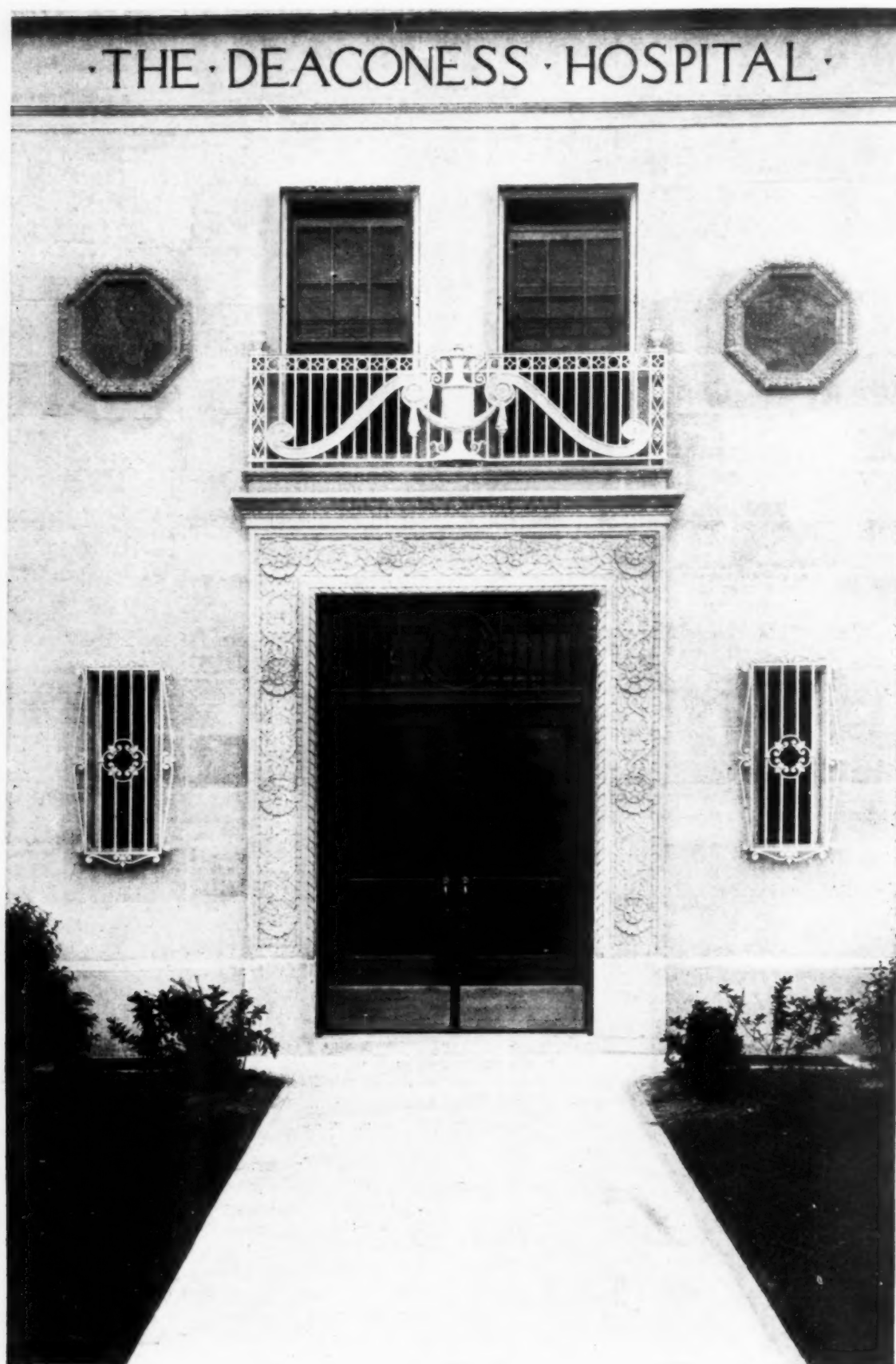
In an article on "Teaching Care of Hospital Equipment", published in the *American Journal of Nursing*, Charlotte Janes Garrison, R. N., superintendent, Community Hospital, Geneva, Ill., points the way to effective methods of teaching the obligation that underlies the use of community funds. The problem of making hospital workers conscious of individual responsibility in their use of supplies and equipment is ever present in hospitals and the following suggestions made by Miss Garrison should be helpful in this connection.

A careful use of manufacturer's directions for use of equipment will help to conserve property and insure intelligent use. When possible, a service man will make a demonstration to a group and add to the general information regarding the machine. All manufacturers are eager to meet the viewpoint of the consumer and are anxious to have their article properly installed and used.

Recently a new superintendent found a type of bedpan washer, which she had coveted for years, out of service in a well equipped hospital. To her inquiry her supervisor answered she had been there a year, and the washer had never been used; she thought it to be out of order. A service man, called from the factory, found the washer in perfect condition, save for two fifty cent clamps. A utensil costing \$250, placed to make a disagreeable task lighter, was useless for a year, because no one was watching the proper use of equipment. Hospital storerooms are full of articles unfortunately chosen; more are out of service because of frequent changes in personnel and lack of interest.

Printed Directions Are of Help

Printed directions, framed and hung at reading height of the apparatus to be used, will be of help. Routine inspections by the engineer, maintenance man or superintendent are of distinct value. The use of repair slips, made out by a department head, approved by the superintendent, executed and returned to the superintendent's office for filing by departments, is another excellent check on the work that is being done. A posted note of the repair cost for a burned-out sterilizer, a tray of broken dishes, or a syringe, will cause even the most callous interns and indifferent nurses to pause before repeating the carelessness that caused the accident.



The main entrance is beautifully executed in carved stone. The rondels on either side bear ancient medical symbols and the insignia of the Ohio Hospital Association is introduced in the grille.

Cincinnati's Latest Contribution to Modern Hospitalization

By H. P. VAN ARSDALL

Samuel Hannaford & Sons, Architects, Cincinnati

THE new medical and surgical pavilion of Deaconess Hospital, Cincinnati, is the most recent addition to Cincinnati's long list of well planned and well equipped hospitals. This city has been fortunate in having many progressive hospital superintendents who have demanded modern buildings and equipment to care for the sick and facilitate the work of the doctors, surgeons and nurses.

To Rev. A. G. Lohmann, superintendent, is due the chief credit for raising the funds and directing the building operations. During the fall of 1925 he inaugurated a campaign to raise \$500,000, and within ten days the campaign was closed with the sum of \$510,000, subscribed by 8,600 donors, with subscriptions ranging from fifty cents to \$8,000.

Dr. A. C. Bachmeyer, superintendent, Cincinnati General Hospital, Cincinnati, in the capacity of consultant and adviser ably assisted the architects in planning and equipping the building.

The old hospital, of which this becomes a part, consisted of a main wing containing seventy-five hospital beds, a nurses' home and a power house with laundry, which was completed in the fall of 1925 and is of sufficient capacity to serve the entire group, including the new wing.

Zoning Law Is Obstacle

A serious problem in the development of the plans was presented by the new Cincinnati zoning law, which, strictly construed, requires a hospital building to be placed fifty feet from any lot line. However in view of the special conditions surrounding this particular building, the zoning board of appeals waived these restrictions in this case and permitted the layout that had been planned.

The building is situated on the hilltop at the corner of Clifton Avenue and Straight Street, with its principal front to the east, facing the campus of the University of Cincinnati. On the south there is an uninterrupted view of miles and miles of beautiful residential districts, to the hilltops on the other side. A more charming location could scarcely be found within the city limits.

The building is "L" shaped, facing one hundred and seventeen feet on Clifton Avenue and one hundred and four feet, six inches on Straight Street, to its junction with the old hospital, leaving an interior court of sixty-seven feet between the old and new wings. Including the basement, the new wing is six stories in height, with its structural supports designed for two additional floors whenever the need arises. Architecturally, the treatment is Italian Renaissance, simple but effective, with ornament used sparingly. The main entrance is well designed and beautifully executed in carved stone. The rondels on either side, bearing ancient medical symbols, indicate the character of the institution, which is further emphasized by the insignia of the Ohio Hospital Association, in cast bronze in the grille over the doorway.

Ambulance Entrance Opposite Elevator

The main entrance leads into a modest sized lobby, where you find on your right the business office, on the left a public waiting room, and opposite the entrance doors the information desk and elevators. The ambulance and service entrances are reached through the courtyard situated between the old and new buildings. The ambulance entrance is directly opposite the elevator. The service entrance could not be made through the ground floor, but is arranged with steps leading from the courtyard to the basement, where is the checker's office. All foodstuffs and supplies delivered to the building are brought to the courtyard, lowered to the basement floor by the lift, passed over a dormant scale for checking and then trucked to the proper storeroom.

The basement, with approximately two-thirds of its wall height below grade, is used for those services and storages that are not fully dependent upon abundant light, yet every room is amply lighted by means of deep areas directly in front of each window. Here we find a large nurses' rest room with clothes' lockers and toilet; help's toilet; an electrically operated refrigerating plant for making ice and providing the cooling element for all refrigerators; the canned goods room, where

all shelving and bins are constructed of metal; the bulk storage room, with specially constructed ventilated wood bins for tubers; a bulk storage room for cotton, dressings and sundries; a set of sterilizing rooms (infected and disinfected) for a steam-formaldehyde disinfectant; a room for old clinical records; furniture storage, and certain mechanical equipment accessory rooms.

In addition to these is the morgue, which is deserving of especial mention. This room, approximately fifteen by seventeen feet, is equipped with a two-body refrigerator, gas hot plate, surgical

with ample space for observers, and is erected on sanitary terrazzo bases, with the main supporting pedestals forming a hollow space for plumbing pipes. Pedestals are arranged with monel metal access doors. On the operator's side of the table, control valves for water supply are conveniently placed. On the opposite side is a water outlet for hose and spray connection.

The floors throughout the basement are of cement, except in the morgue, where terrazzo floor and wainscot have been provided.

The ground floor houses principally the admin-

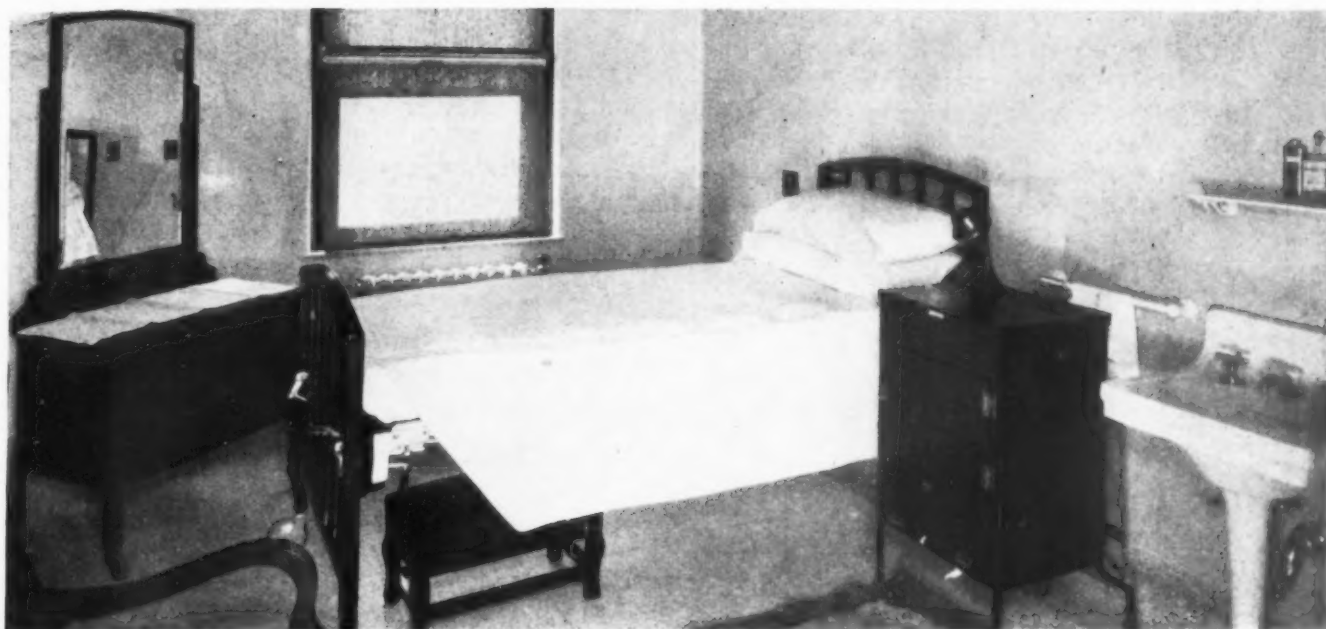


In the pharmacy are sectional wall cabinets and a built-in prescription case; also a china sink with marble counter

instrument case, floor drain, ceiling lights, electric wall plugs for portable lamps and a large mortuary table. The table was designed by Dr. A. C. Bachmeyer and developed by the architects. It is constructed of black slate. At the left end is placed a head block and drip sink, the sink being slightly beveled at the front to provide leg and knee comfort while sitting on a stool. The main body slab which is countersunk extends in length seventy-eight inches and drains to the other sink. To the right of this sink the table is arranged with a countersunk slab where removed organs are placed. The table is in the center of the room

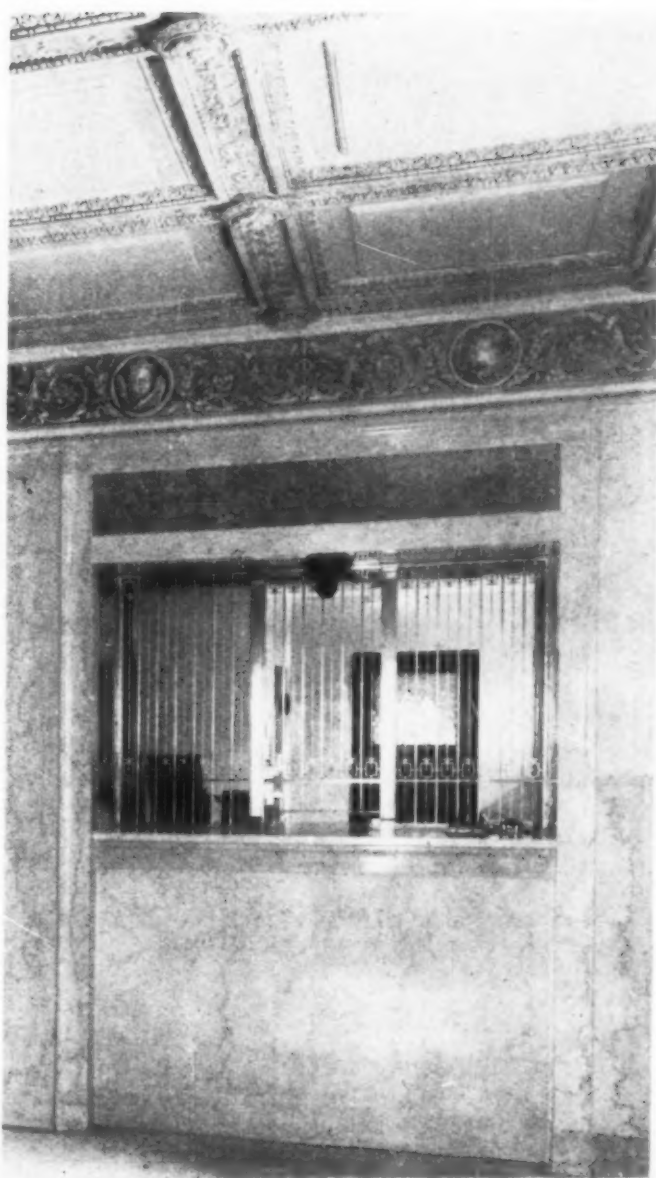
istrative and dietary departments. The lobby has been artistically treated with a coffered ceiling, marble floors and wainscoted walls, to give a favorable impression to the patient and the visiting public. The remainder of the rooms on this floor are fully equipped with all necessary furnishings and mechanical appliances that are found in the modern hospital.

The kitchens and dietary work rooms on this floor deserve comment. These rooms are unusual because of the absence of piping and ventilating ducts from walls and ceiling, an arrangement that has permitted a reduction in ceiling height and a



The private rooms are ten feet wide by fifteen feet long. In addition to the room door, screen or "dwarf" doors are provided.

consequent saving in construction costs. The kitchen is planned for central tray service, a system that has been often described in previous issues of THE MODERN HOSPITAL. The floors are of rainbow tile, with walls wainscoted to a height of five feet, with six inch by six inch white glazed tile. The equipment is operated by steam or electricity and is placed on a sanitary tile base. The large vent hood over the kitchen ranges is directly connected to a vent duct, exhausting downward through a heavy metal duct, which discharges into a vertical brick stack extending above the roof. Refrigerators, all of the built-in type, are constructed with tile floors and walls. Ample space has been provided for



The information desk is opposite the entrance door. A section of the richly decorated ceiling is shown in the picture on the left.

the necessary equipment installed in the bake shop, butcher shop, diet kitchen and dishwashing room. A room for the dietitian is conveniently placed adjoining the kitchen.

In the old building adjoining the new kitchen a large dining room for the hospital personnel has been constructed, arranged with cafeteria service.

The first, second and third floors, each contain twenty-six beds, making a total bed capacity of seventy-eight. The room arrangement presents nothing unusual, except that particular attention has been given to the placement of service rooms, to avoid, so far as possible, noise generating centers adjacent to patients' rooms.

The private rooms

sity small, have proved ample in size. These rooms have tile floors and wainscots and are equipped with vitreous china sinks (with grease trap), electric drink mixers, four-compartment refrigerators; built-in dish cabinets with marble top work counters, telephones, speaking tubes and electric wall hung stoves. They are served by two electrically operated automatic dumb-waiters.

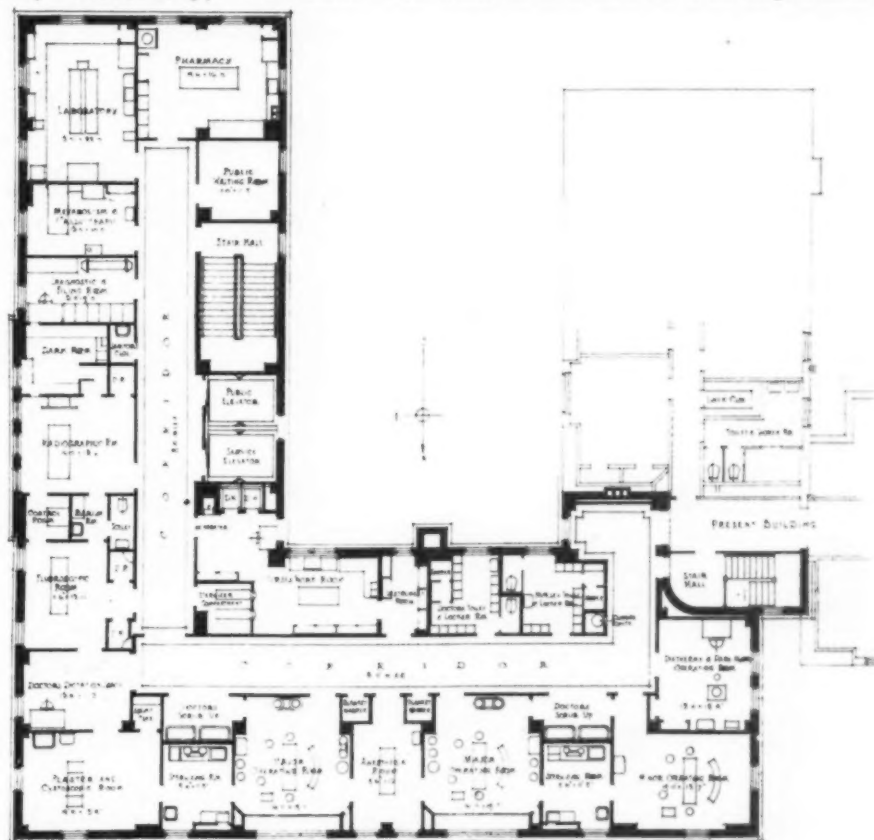
All other necessary utilities are provided on these floors such as treatment rooms, incinerator, orderlies' desks, nurses' toilets and linen closets.

On the fourth or top floor are the operating and surgical suite, x-ray department, laboratory,

boards and necessary electric and also gas outlets.

The x-ray department has its diagnostic and filing room, equipped with film filing cases, desk and chair and stereoscope. The dark room, with its light lock door, houses the five-compartment developing sink, work table, film cabinets, work counter and drying racks. The developing sink is arranged with the cold water faucet supplied with ice water to prevent the spoiling of films. The radiographic and fluoscopic rooms are separated by the control cabinet room, barium and toilet rooms. The barium room is supplied with a small monel metal top refrigerator, electric drink mixer and sink. All walls and floors of this department

Here is shown the fourth or top floor, where are the operating and surgical suite, x-ray department, laboratory, pharmacy and nurses' workroom. Every facility has been provided on this floor for the comfort of the patients and those who serve them.



pharmacy and nurses' workroom. Every facility has been provided on this floor for the comfort of the patients and those who serve them.

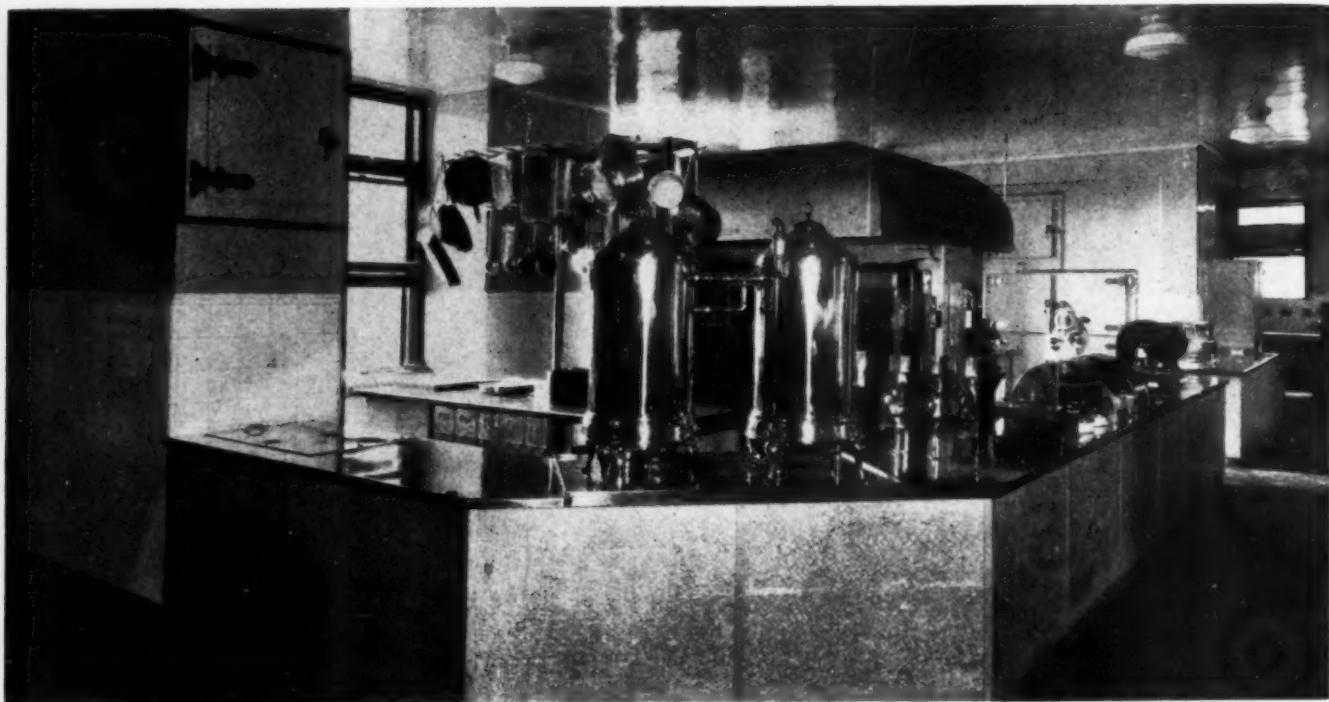
The pharmacy with its rubber cushioned floor, built-in prescription case and sectional wall cabinets, vitreous china sink with marble counter and drainboard, gas hot plate, two-compartment refrigerator, steam operated water still, and large ebony (acid proof) top work table, is modern in all of its appointments.

The laboratory, adjoining, is equipped for the study and examination of frozen specimens and the routine study of blood, urine, stomach contents and feces. It has rubber flooring and is furnished with autoclave; chemical table; stone sink; shelves and peg boards; fume hood, two compartment refrigerator; wall counters; cup-

subject to passage of electric rays are constructed with concealed lead linings, with room doors lead cored. In the dark and diagnostic rooms sprinklers have been installed, also fire vents and wall scuppers.

The plaster and cystoscopic room is well placed and is properly equipped for its service.

The major operating rooms are finished in light gray ceramic tile floors, with seven-foot wall wainscots of six by six inch dark gray matt glazed tiles. The windows are steel casement sash, in front of which are placed protecting glass screens. These rooms are equipped with electric outlets for portable lamps; operating ceiling lamp, connected on two circuits, with automatic throw-over in case one circuit fails; remote control electric switch for ventilating fan; film viewing cabi-



A view of the main kitchen, which is planned for central tray service. The floors are of rainbow tile.

net; emergency signal call for nurses' and surgeons' lavatory.

The roof of the building is arranged as an open air ward for heliotherapy, and is made accessible by the extension of stairs and the patients' elevator.

The main corridors of the building have floors

with terrazzo borders and rubber tile centers, all bedroom floors are of terrazzo, and all service and toilet rooms have tile floors and wainscots. Sterilizers are of the wall hung type, operated by high pressure steam. Plumbing pipes are of brass (iron pipe size), with fixtures of vitreous china or porcelain enamel enhancing their appearance.



The nurses' station and corridor on the private room floor.

Recreation Is an Asset in the Care of the Mental Patient*

By A. L. BOWEN

Springfield, Ill.

IN 1846 Dorothea Dix aroused the people of Illinois by her revelations of the horrible conditions in which the insane and feeble-minded of that state lived.

Out of her story and her pleadings for state care for these unfortunates, the present Jacksonville State Hospital, Jacksonville, Ill., emerged. It represented the first effort of that commonwealth to house and treat what is now recognized as a definite class of sick persons. It has passed through all the stages that have marked the progress of mental medicine and today is an exponent of advanced ideas in the care of the mentally ill.

The genesis of the hospital was humane. It was designed to give to bereft human beings better shelter than they had yet received. True, one reason advanced for the establishment of the institution was the need for medical treatment and preventive measures, but this was only a dream of farsighted men who had little hope that they would live to see it come true.

I shall never forget my first visit as a state

official to this hospital. Just before my induction into my position in 1910, as executive secretary of the Illinois State Charities Commission, our asylums, by legislative and administrative decree became "hospitals," but only through a long, tedious evolution have these institutions come to look like and to be like hospitals.

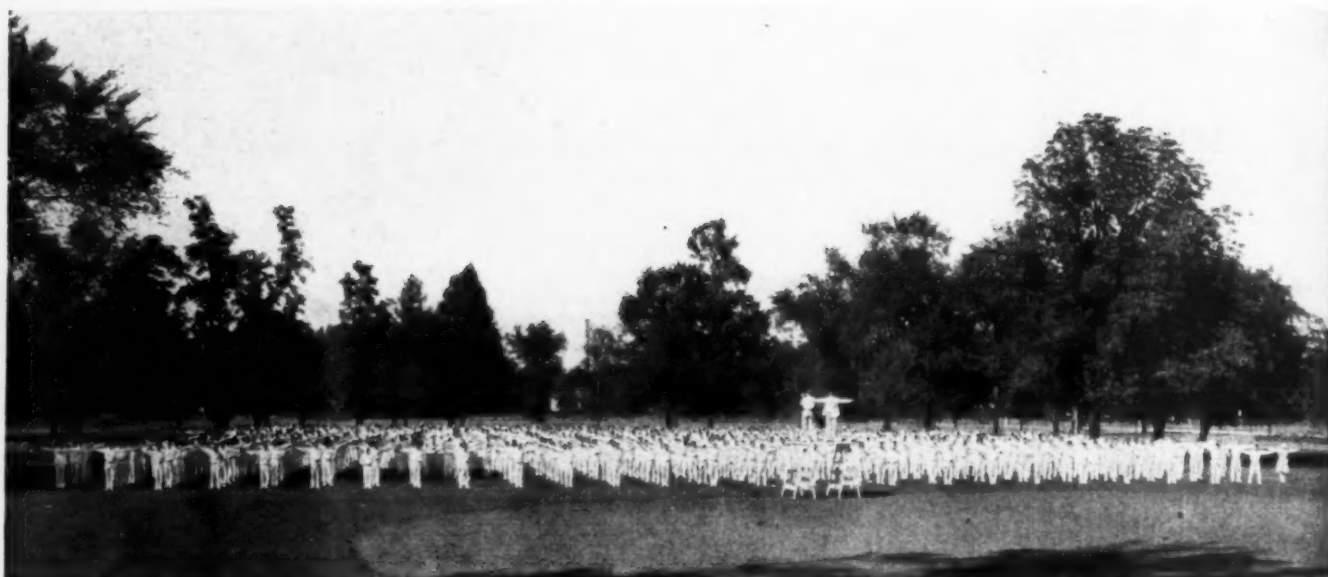
"Everything Under Lock and Key"

The alienist of our organization had said, "You will find an immaculately kept house, good order and discipline, but everything is under lock and key." The original ideals of institutional care were in practice. I was struck by the high quality of the housekeeping and the absence of confusion and noise. The hospital was on the edge of the city. Its spacious grounds, closed off behind an ornamental iron fence, such as might be found about a rich man's estate, were deserted and lonesome. There were two immense buildings, each a Kirkbride unit. One, with a "center" of six floors and wings, to the east and west, was painted gray, with brown trimmings. The other stood at

*This is the third of a series of articles dealing with the problems of hospitals for the mentally ill.



Many of the women patients enjoy a game of baseball and greatly benefit from the invigorating exercise



Organized physical exercises are planned for both men and women, and visitors assemble on Saturday afternoons to watch the spectacle

right angles along the west line of the grounds. It was of unpainted, light red or pink brick. Each building was at least one thousand feet from tip to tip. In the rear of each were its kitchens and dining rooms. The members of the medical staff and their families were housed in the two centers. An amusement hall had been included in each unit. The power plant, laundry, bakery and certain shops were in the rear of the building.

At each end of the gray structure, massive high concrete walls enclosed a large open space, known as the "bull pen." The untidy and disturbed wards opened from the ground floor into these enclosures. Shelters from the sun, with benches underneath, were the only inanimate objects behind these walls. Here these terrible human shapes in strong suits, often barefooted, with matted and tangled hair and unkempt faces, exercised in various ways while stern attendants stood guard.

For a distance in front of each building the lawn had been cropped and beautified. Everything was old but in good repair, and patient and employee came and went by a synchronizer's beat. There was a detached infirmary but there were no real hospital quarters for the physically sick. A small one-story frame and stucco detached ward for tuberculous patients was the latest acquisition and every one was proud of it. The state has built nothing better for its tuberculous insane than this little building which has been a model in that state for fifteen years or more.

I saw here what I had seen in all Illinois asylums—idle men and women, routine medical service, locked wards, barred windows, noisy men, disheveled women, violent men, obscene women. Through grated wickets I could look into bare

wards, where unclothed patients milled and ground in their naked feet, often in their own filth. There were the restrained, strapped to the corridor benches or prostrate on their beds. There were the rooms whose windows had been closed by steel sheeting, perforated with small holes to admit a little air and a little light. Hydrotherapy was not known and occupational therapy was an unfamiliar term. Ablebodied, trustworthy men and women were locked out and locked in like prisoners in a penitentiary, as they came and went, doing the drudgery about the place.

It was a good institution, measured by the standards of the day. I offer this brief description in no critical spirit.

Vision and Determination Needed

But I had been unable to reconcile myself to the story I had heard everywhere and from many lips that these are the insane and this their inevitable end. I simply didn't believe it. I could not forget or ignore the achievements of men in many fields in which greater obstacles had been battered down and undesirable conditions changed and improved. Surely the genius of normal, sane men was equal to this problem. Granting the deteriorating and destructive forces of mental disease, I still contended that such sights as I had seen on these first visits were a humiliating confession of indolence and inertia on our part, and showed a lack of vision and an absence of determination to find better methods of caring for the mentally sick.

Happily I found others who shared that opinion, among them Dr. E. L. Hill, who became superintendent of the Jacksonville State Hospital in 1915. I became skeptical, almost cynical, when

excuses were offered for conditions I did not believe to be irremediable.

The changes that have taken place in the eighteen years that have passed since my first visit to Jacksonville, I can best describe by relating what I saw at that same institution on a recent Saturday afternoon, letting it stand against the picture I have just drawn.

What I saw was not the result of a day's work. The changes have come about through an evolution, in which the inspiration of one man, the superintendent, Dr. Hill, has been the propelling force. The city has spread far beyond the hospital grounds and has closed in on three sides of the state's property. The landscaped areas extend to the fences; there is a beautiful park with old forest elms.

The old buildings are there, one, in a fresh coat of gray and brown, the other, in the original light pink. North of the so-called annex is the one-story unit, designed, maintained and operated for the care of veterans of the World War who require attention for mental and nervous diseases. East of the big gray house, the "bull pen" has been removed and in its place is the steel skeleton of a new amusement hall that will seat 2000 persons. Back of the annex, in process of construction, are two, one-story infirmaries of the style and pattern that Illinois adopted some years ago for the care of the aged and infirm.

In the rear of the gray house is an immense factory-like structure, for industrial and occupational therapy. To the west and south, lands and gardens have been added, until there are 1200 acres where patients may enjoy the invigorating and healthful exercises of outdoor employment.

Saturday Afternoon Recreation

The old fountain plays in front of the administration center and a flag lazily extends itself from the white staff. I sit on the veranda and watch the spectacle that unfolds itself on the velvet lawn before my eyes. From the wards on all sides, as soldiers in company formation marching from their quarters into the parade grounds, the people of this hospital are gathering on the lawn for their Saturday afternoon recreation. Every man is in a white duck suit; every woman in black skirt and white blouse. All wear white shoes. A band is playing—a first-rate band composed of men patients. There are the same sounds and the same joyfulness that one hears from normal folks under similar circumstances.

Every able-bodied patient in that institution has come out and joined this assemblage of 2500 men and women. From a high stand, the athletic director speaks and a megaphone carries his in-

structions to the last ranks. There are marches and countermarches, calisthenics, setting up drills, and then dispersal into small groups, each under a play director who sees that his charges take part in the exercises that are best suited to them. The young women take to the diamond to play baseball; the older women engage in less strenuous pursuits.

A mite of an Italian girl mischievously swings the bat and meets the ball with a crack. She cries aloud in her exultation, a wild musical cry, as she darts past the bases, halfway around the diamond. "She came here with a vicious record of destructiveness and violence in nine different institutions," says the superintendent. "The government has been trying for two years to deport her. She has lived here in our liberal environment and has made no effort to escape." She darts home with another ringing, triumphant exclamation of joy. "When her day is done she has shared in a rational mixture of play, exercise and creative work; she is ready for a night's rest."

Many Visitors Are Present

Four o'clock arrives; the band takes its place and the companies fall into their proper formation and come forward for the ceremony of lowering the flag. Afterward, supper is served, either in the ward dining rooms or on the lawn. Sometimes there are speeches by visitors. Always there are crowds of townspeople or guests to witness this unique sight.

Half the wards in this big hospital are now unlocked. The new buildings are without bars on their windows or locks on their doors. There is not one among these 3100 persons who must be restrained under strap or in camisole. A supervisor whom I had known when I was in the service introduces himself to me. "Do you remember me," he says, "I am Mayes; I used to be on the back wards and then on the 'hydro,' when you visited us. It's quite different now and so much better. We do not have fighting and quarreling. You can see the men and judge for yourself."

And I could. All were clean shaven. There was no matted hair, no filth among them, no brown "teddy-bear," no strong suits, no "bull pen" habitués. Among the women I found no disheveled hair, no fighting, no quarreling. The wickets are no longer there. The back wards look as well and as homelike as the front wards. There is mental deterioration in the weary eye, the unsteady gait, the slow response. A reproachful silence or an outburst of profanity often meets a friendly greeting, but there is no denying the fact that a remarkable change has come over men and women we used to call mad.

The institution is adequately provided with modern hydrotherapeutic equipment. It has a hospital unit for physical sickness, as complete and as modern as any civil community of equal population might expect for its normal population. Nurses and attendants live in their own house. The dairy herd has about as fine a group of buildings as will be found anywhere. Many patients live on the farms in cottages under much the same conditions as ordinary farm laborers.

The superintendent informed me that since 1918 more than four hundred thousand dollars has been spent on new buildings, which have been erected by the hospital's own corps of employees and by patients, with a material saving of money. Occupational therapy, introduced on a small scale in 1917, has expanded until today 2,500 patients spend a portion of each day in occupational therapy, industrial or vocational classes. Sunday school is held each Sunday on each ward, while 350 of the better patients go to the central hall for such services. Four hundred take part weekly in community singing. Last year 208 patients were paroled home. Social service has been organized for the purpose of following up paroled and discharged patients and assisting them.

What the Medical Staff Accomplishes

Medical work has not lagged behind these achievements for the mental and physical improvement of patients through physical exercises and stimulation. I was called to one side of the grounds to see a group of forty men and women who have been undergoing the malaria treatment for paresis. Some of them had been under treatment for two years and others were just beginning. Having gained a fair knowledge of the physical signs of this disease, through my observations during the period of my connection with the state institutions, I was able to judge how much progress had been made by these men and women. Paretics do not reach the state hospital until they have passed almost beyond medical help. I talked with the patients and observed their behavior. Every one of them was clean and tidy. Except for two or three late admissions, all appeared to be well nourished, a fact that was established by their weights. Only the new patients showed speech defects. Some of them from my own city talked with me, not only about themselves and their cases and the news from that city, but also about my daily signed contributions to the newspaper with which I am connected. That they were telling the truth I had no difficulty in establishing by a few simple questions as to what particular subjects in my writing interested them most.

The hospital soon will be able to publish a comprehensive report on its experimentation with malaria upon paretics. It will cover a period of more than two consecutive years, during which the work has been maintained under uniform pressure, most of the time under the direction of the same physician. It is claimed that the experiments have established this method as a positive cure for paresis, but that it can and does improve the physical and mental condition of the victims seems to be evident. I mention this bit of medical work as an example of what the medical staff of a state hospital can accomplish and now considers it proper to undertake.

A Striking Contrast

I do not wish to have this article taken as a description of a solitary or unusual example of the success of new ideals of state hospital administration and service. There doubtless are other institutions that have made as much progress. I offer this description merely as evidence of the contrast between conditions in 1910 and 1927, a contrast of which I myself am cognizant, by reason of my familiar and intimate relations with state institutions of Illinois from 1910 to 1921.

I think the facts I have related are encouraging and offer suggestions not alone for the refinement of these new methods but for the introduction of others. They also make evident the need for preventive work in civil society, among children, adults and even the aged, who make up, largely, the population of these institutions.

How Social Worker Aids the Nurse

The hospital social service department makes a valuable contribution to the training of the student nurse since it teaches her to respect the individuality of the patient while giving him expert nursing care, says Gladys Sellow, director of nursing service, Babies' and Children's Hospital, Cleveland, in a recent issue of *Hospital Social Service*.

There is an increasing realization of the danger that consideration of the individual be lost in the interest in the case. This danger arises from the fact that doctors and nurses are chiefly concerned with the immediate physical and mental needs of the patient. The cause of the patient's condition lies in the past; the test of present successful care is the patient's condition in the future. The period of sickness looked at from this point of view ceases to be a unit clearly marked off from preceding and succeeding periods of health and assumes its normal relation to past and future.

In stressing this point we not only emphasize the continuity of the individual's existence but unite his condition with that of hundreds of others, since the conditions influencing his health are interwoven with those affecting the health of the community.



Making the Small Hospital Attractive

By G. E. MYERS, M.D.

Las Campanas Hospital, Compton, Calif.

LAS CAMPANAS Hospital, Compton, Calif., gained its name from the bells that hang in its tower, illuminated at night and causing conjecture on the part of observers as to the nature and use of the building.

This new hospital was opened for the reception of patients on August 1, 1927. The minimum requirements of the American College of Surgeons were borne in mind in planning the construction, equipment, laboratory facilities, system of records and staffing. The hospital is operated on the open staff plan and the members of the staff must be eligible to membership in the American Medical Association.

The exterior of the hospital presents a modified Spanish type of architecture, with fourteen-inch vitrified hollow tile walls, plastered in a mellow tan to imitate adobe. Each third layer of tile is covered with a layer of wire mesh to prevent earthquake cracks. The roofs are of tile.

Within is more spaciousness than is suggested by a view of the exterior. There is more than ten thousand square feet of floor space. The basement contains the kitchen, nurses' dining room, locker room for clothing storage, morgue, boiler room and general storage rooms. Food service to patients is expedited through the use of an elevator that takes a sixteen-tray food conveyor. Diet kitchens are placed for quick service.

On the first floor are thirty beds for patients in private rooms, semi-private rooms and wards. Each bed has a mattress of the multiple coiled spring type that attracted favorable comment at the last meeting of the Western Hospital Association, because of its comfort and evident durability. Mattress pads are used throughout the hospital. Each bed has a nurses' call, telephone and radio plug-in. The rooms vary in their color schemes and the gray tone in the halls has been given favorable comment. The electrical fixtures were especially designed and are not of the usual formal hospital type.

Everywhere an effort has been made to subdue noise. The doors do not latch but remain closed through friction. Night lights are equipped with as noiseless switches as could be procured. Walls are soundproofed and are in some cases of hollow tile. Thus a hollow tile wall separates the nursery from the adjoining ward. The sterilizing equipment is in a room adjoining the surgeries, with a hollow tile separating wall, thus preventing heat and noise of sterilizers from reaching the surgery.

The labor and delivery rooms adjoin each other and have a large connecting door. The walls are especially soundproofed. The doors into hallways are soundproofed around their borders. The windows are double and stationary, and thus have

a dead air space between them, preventing the transmission of sound to the outdoors. An obstetrical patient is brought into the labor room in her own bed, the doors are closed and adequate fresh air is provided by means of a forced ventilation system, with inlets and outlets properly placed in the ceilings. The patient finds herself in quiet, comfortable quarters and other patients are not disturbed by her. The arrangement has proved satisfactory.

The major and minor surgeries are floored with terrazzo and the walls are covered with painted canvas which can be readily cleaned. The instru-

ment and bandage cabinets are built in. Ethylene gas, nitrous oxide and oxygen are piped to the surgeries and to the delivery room.

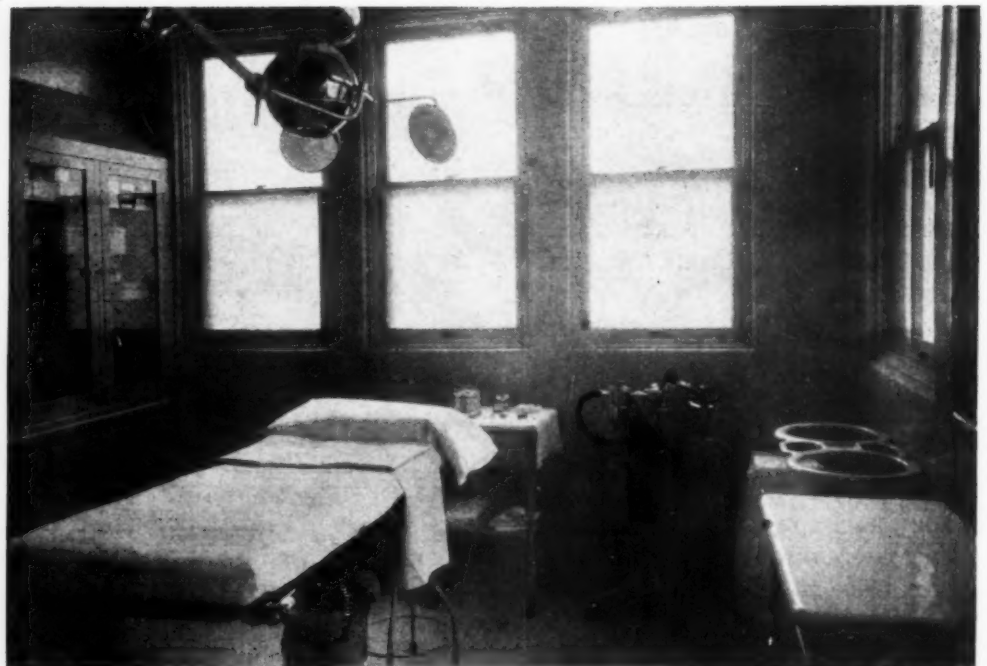
The halls are floored with terrazzo and the patients' rooms with cement. Hardwood floors are provided in the business office, the superintendent of nurses' office and the reception room.

The x-ray equipment is compact and efficient. A technician is in charge. The stereoscope is in a room separate from the x-ray equipment, with the intent of making it accessible and avoiding the delay frequently experienced in hospitals where the stereoscope is in the same room with



On the left, one of the private rooms, made attractive by dainty curtains and growing plants. The color schemes vary in the different rooms. Especially designed electric fixtures are used in every room.

On the right is shown the major surgery. The floors are of terrazzo and the walls are covered with painted canvas which can be readily cleaned. The instrument and bandage cabinets are built in.



the x-ray equipment. An airy, well lighted clinical laboratory is on the second floor. The hospital is prepared to render reports on all forms of clinical laboratory work and x-ray examinations.

On the second floor is a large, pleasing room, forty by forty feet in size. This room for the present is used as a reading room and staff meeting room. It will, however, be divided into rooms for patients, when, as is anticipated, it becomes necessary to enlarge the hospital. The hospital has been planned for seventy-five patients, to which capacity it will be brought through additional construction.

The hospital grounds are spacious and have a variety of shrubs, flowers and trees, the latter offering a haven for birds. The nurses' home is adjacent to the hospital.

Las Campanas Hospital is attractive without and within, is excellently constructed and equipped and an effort is made to give the most efficient service to patients. Only graduate nurses are employed, under the direction of an experienced superintendent of nurses. A request has been made for inspection of the hospital by a representative of the American College of Surgeons and for its official recognition as a standardized hospital.

There is a recognized need for a general hospital at Compton, which is approximately the center of an area in which are more than fifteen towns without a hospital of the type that this new institution represents. The heartiest cooperation of chambers of commerce, other civic bodies and of citizens of the community has been given this project. Useful information and time-consuming assistance have been cordially given by those in charge of hospitals in other nearby towns. The interest of the physicians has been manifest throughout the period of construction, and has evinced itself especially in their hearty support since the opening of the hospital. There is every indication that this hospital will prove to be an efficient unit in the growing community that it serves.

Rockefeller Foundation Aids Health Work

In a review of the activities of the Rockefeller Foundation in 1926, issued recently, the year's work is briefly summarized as follows:

During 1926 the Rockefeller Foundation, in disbursing \$9,741,474, (1) aided the growth of fourteen medical schools in ten different countries; (2) maintained a modern medical school and teaching hospital in Peking; (3) assisted the development of professional public health training in fifteen institutions in twelve countries and in ten field stations in the United States and Europe; (4)

contributed to nurse training schools in the United States, Brazil, France, Poland, Yugoslavia, China, Japan, and Siam; (5) sent, as emergency aid, journals, books, or laboratory supplies to institutions in twenty European countries; (6) helped twenty-one governments to combat hookworm disease; (7) gave funds to organized rural health services in 244 counties in the United States and to thirty-four districts in twelve other countries; (8) shared in the creation or support of various departments in state or national health services in sixteen countries; (9) cooperated with Brazil in the control of yellow fever, or in precautionary measures against the yellow fever mosquito, in ten states; (10) continued yellow fever surveys and studies in Nigeria and on the Gold Coast; (11) aided efforts to show the possibilities of controlling malaria in nine North American states and in Porto Rico, Nicaragua, Salvador, Argentina, Brazil, Italy, Spain, Poland, Palestine, and the Philippine Islands; (12) helped to improve the teaching of physics, chemistry, and biology in eleven institutions in China and in the government university of Siam; (13) supported the Institute of Biological Research of the Johns Hopkins University and contributed toward the publication of biological abstracts; (14) gave funds for biological or mental research at Yale University, the State University of Iowa, and the Marine Biological Station at Pacific Grove, California; (15) provided, directly or indirectly, fellowships for 889 men and women from forty-eight different countries, and paid the traveling expenses of sixty-nine officials or professors making study visits either individually or in commissions; (16) helped the health committee of the League of Nations to conduct international study tours or interchanges for 120 health officers from forty-eight countries; (17) continued to aid the League's information service on communicable diseases; (18) made surveys of health conditions, medical education, nursing, biology or anthropology in thirty-one countries; (19) lent staff members as consultants and made minor gifts to many governments and institutions; (20) assisted mental hygiene projects both in the United States and in Canada, demonstrations in dispensary development in New York City, and other undertakings in public health and medical education.

Physical Therapy Departments Grow Rapidly

The following advice with regard to the wiring of the physical therapy department is offered by Dr. T. Howard Plank, San Francisco, Calif., in a recent article in *Better Health*: "When installing a physical therapy department it is always advisable to over-wire it and to place more outlets than are needed for present use. Physical therapy departments grow rapidly and extra current will be demanded to care for this growth. Extra apparatus will be required also, at unusual times, hence the need for large wires and extra outlets.

"Where it is at all possible, wire for both direct and alternating currents. Both are required for physical therapy apparatus. If only alternating current is available, rectifiers will be demanded, while if only direct current is at hand rotary converters must be used with their hum and grease. Either rectifiers or rotary converters will add much to the expense of equipping the department. If both currents are installed, be sure to have different outlets so that apparatus for one current cannot be plugged into the other.

Why the Small Hospital Needs a Social Service Department*

By NATHANIEL W. FAXON, M.D.
Director, Strong Memorial Hospital, Rochester, N. Y.

DR. MORRIS RICHARDSON of Boston, beloved by all who knew him, often answered the query, "Why do you think this patient has appendicitis?" by saying, "Because he has appendicitis!" So I shall answer the question, "Why does the small hospital need a social service department?" by saying, "Because it does!"

Realizing that such an answer will be unsatisfactory to the majority of people and especially to the trustees of a small hospital who might be considering the advisability of establishing such a department, I shall mention a few of the other reasons that might be advanced to amplify my original statement and to overcome, perhaps, the doubts of such a board.

It will be well first of all to define what is meant by a small hospital. So, for the purposes of this discussion, let us consider it to mean a hospital of approximately one hundred beds. Of course all that may be said about the advisability of a hospital of this size having a social service department, might apply to selected hospitals of smaller size. But in general, I believe that hospitals of less than one hundred beds will need social service only to meet special conditions.

What does a social service department do and why can it do these things better than any other hospital department? If we can show that social service has a part to play in getting people well, and that it can do its part well, then there is real justification for establishing such a service.

*Read before the twenty-ninth annual conference of the American Hospital Association, Minneapolis, Minn., October 10-14, 1927.

The basic work of a social service department is to obtain social data concerning patients in the hospital. The importance of such information in establishing a correct medical diagnosis and proper treatment is well understood and is admitted. To be sure this information might be obtained by the

doctor himself, had he both the inclination and the time. The successful country and family doctor has done this work and still does it. But group medicine, specialized medicine and hospitalized medicine, while gaining ground on the medical side, seem to have lost contact with this environmental and social side of the patient, which is so essential to treatment, prognosis and even diagnosis. In hospitals doctors occasionally retain their interest in the social side of patients. Social service owes much to those who do. But experience has shown that

A Valuable Adjunct

SOcial service is an adjunct to the proper understanding, diagnosis and treatment of patients. It is a development of modern medicine, grown up to meet the need occasioned by the change from family doctor to group medicine. It helps the hospital doctor to understand his patients. It aids the hospital superintendent in smoothing the strange pathways of hospital life. It directs the halting steps of those leaving the hospital towards returning health. It keeps hospital workers, who are so apt to fall into rigid monastic ways, in touch with the outside world and so more human and humane. It has improved the ways of meeting old needs and has discovered new.

aside from rare exceptions, doctors are too severely pressed by the demands of modern medicine to find time personally to gather social histories. Consequently this work is not done unless by a social worker.

The social histories of patients reveal the fact that certain people who come to hospitals are free from organic disease and yet since they are out of adjustment with their world they are socially ill. In the country these patients are treated by the country doctor, who knows their family, their pet ills, their good and bad faults, as the saying goes, and who is the one person there who can understandingly gather their medical and social histories and who must give both medical and social treatment. Before social serv-

ice grew up these medically sound but socially ill patients were a nuisance to hospital doctors and superintendents. They were nobody's business, until social service assumed responsibility for their direction and care, under the designation of "social treatment."

If lasting advantage is to be gained from a hospital stay, we must have a rational plan for the patient to follow after leaving the hospital and some means of finding out whether this plan is being carried out. This means a plan for continuity of treatment, home supervision and follow-up. Of primary importance is the fitting of discharged patients into the place best suited for their care such as a special hospital, a convalescent home, the home of their own family or of a friend, according to the needs of the individual patient. If sent home or to a friend's house, provision for bedside care, dressings and further supervision to see that things go as planned, is often necessary. Lastly, intelligent follow-up for groups such as luetic, cardiac and tuberculous patients, where the social problem is an important factor, is necessary unless relapses are to occur and work is to be done twice over.

Active Follow-Up Needed

It is pertinent here to consider why all this might not be done by the administration of the hospital. Of course it is done by the superintendents of many small hospitals. But in hospitals of 100 beds the demands upon the time of a superintendent are such that this work usually is and will be slighted in favor of more pressing demands within the institution. Too often the patient is merely discharged as soon as he can safely leave the hospital, to look after himself as best he may. As for home care, if a visiting nurse association exists, the superintendent can report the case to that organization hoping that it will carry on the work. The superintendent can find little time to visit, investigate and evaluate the various places to which patients might be sent, and so can only by hearsay fit patients and place together. To do such visiting and to make such evaluation is one of the duties of hospital social workers. As for follow-up, the administration can choose between having the work done in the office, with a clerk in the record room doing it, or having it supervised by the social service department. Experience will show that active follow-up, not end result follow-up, is best done through social service.

I am sure therefore that a social service department will increase the efficiency of a hospital along these lines by doing the work better than it can be done by a busy and often harassed ad-

ministration or by any other department of the hospital.

Probably the most important function of social service is the liaison that it provides between administration, staff, community and patient. Social service workers form a lay group with special training, having knowledge of the laws and resources of the community and a thorough understanding of all departments of the hospital and how they may be used to best advantage. They are conscious of the scientific viewpoint of modern medicine yet appreciate the real tenderness underneath the seemingly hard surface. They appreciate the need of administrative machinery and red tape. All this on the one hand and on the other an intimate understanding of the patient, his nationality, background and probable reaction to hospital life and routine. Because they occupy a trusted neutral relation to both hospital and patient, they can fit these two together understandingly and with advantage to both. In other words, a social department is an effective lubricant to the many hospital wheels which often, for lack of a drop of human kindness and understanding, squeak loudly.

These workers also act as a connecting link between the hospital and the social agencies of the community. Relationship between such agencies and hospital administrations is often not as harmonious as might be wished. As usual such antagonism is based upon ignorance or lack of appreciation of the other's point of view and a misunderstanding of what they are trying to accomplish. Because the social service department is a part of the hospital, it has the confidence of the superintendent. Because of their social training and work, the members of the department understand the ways and aims of social agencies. They are thus able to interpret the hospital and social agencies to each other.

Department Pays for Itself

Viewed from an economic standpoint the department undoubtedly more than pays for itself. First, by shortening the patients' stay in hospital, therefore saving both the patient and the hospital unnecessary expense.

The average cost per day of caring for a patient in a general hospital, if he has an acute medical or surgical disease, is around \$5. The cost of care for a convalescent patient in a private home is certainly less; the cost of care in a convalescent hospital or home is less; the cost of care of a chronic patient in a hospital for chronics is less. Consequently the sooner a patient can be moved from an acute general hospital, the greater the gain to the community.

Social service plays an important part in the reduction of length of stay in hospitals. We all are familiar with the difficulties attending the proper placing of patients with tuberculosis, terminal cancer, cardiac disease, nephritis and diabetes; as well as the orthopedic, the convalescent surgical and medical patients who have no home. The amount of work necessary, the length of time consumed are appalling, even for a department bending a liberal part of its energies on these problems alone. How much more delay, if done by an administration having multitudinous other duties. In a 100-bed hospital, if the social service department could reduce the average stay in hospital from fourteen to twelve days, allowing an 80 per cent occupancy of beds, 347 more patients could be cared for. Or put another way, each day that social service can save to the hospital for the care of some free patient means approximately \$5; 400 days means \$2,000; 600 days means \$3,000 and so on. You can estimate the value of your social service department in dollars and cents as well as in other ways.

Continuity of treatment, proper placing and follow-up, relapses and consequent return to hospital care are avoided, where a social service department is active. The saving here is so apparent that no further comment is necessary.

All of this means economic gain to the community.

Charts Are Held Admissible as Evidence

The Court of Appeals of Maryland says that in an action on an accident insurance policy the record disclosed proof of death caused by injury from a fall from a second-story window of a hospital.

The hospital chart was offered in evidence to show that the insured was delirious four hours before he fell. The chart nurse testified that she made certain entries on the chart, covering the day in question, from information given to her by the nurse who was in attendance on the insured that day, and that she correctly and accurately recorded the information so given her. The attendant nurse was out of the state, inaccessible, and beyond the process of the court at the time of the trial. The court of appeals holds that it was error to exclude the hospital chart as not properly authenticated.

The question for decision was the admissibility of the chart, without having as a witness the person who had knowledge of the truth of the facts recorded in the chart. The hearsay rule generally prevents a witness from testifying to an entry unless the witness so testifying has personal knowledge of the truth of the matter recorded. There are, however, certain exceptions to this rule, based on the circumstantial guaranty of trustworthiness of the record itself, and on the inconvenience and virtual impossibility of producing witnesses who could from their own personal knowledge testify to the truth of the entries.

This court is of the opinion that the evidence repre-

sented by a hospital chart contains a sufficient guaranty of its truthfulness. It is a record required by the hospital authorities to be made by one whose duty it is correctly to make the entries therein contained. So far as the hospital is concerned, there could be no more important record than the chart.

This record is one of the most important advantages incidental to hospital treatment, for it not only records for the use of the physician or surgeon what he himself observes during the time he is with the patient, but also records at short intervals the symptoms, condition and treatment of the patient during the whole time of the physician's absence. On this record the physician depends in large measure to indicate and guide him in the treatment of any given case. Long experience has shown that the physician is fully warranted in depending on the reliability and trustworthiness of such a record.

Importance of Record

It is difficult to conceive why this record should not be reliable. There is no motive for the person whose duty it is to make the entries to do other than record them correctly and accurately. On the other hand, there is the strongest reason why he should: First, because of the great responsibility, he knowing that the treatment of the patient depends largely on this record, and, if it is incorrect, it may result, and probably will result, in the patient's failure to receive proper surgical or medical treatment, which failure might be followed by serious consequences or even death. Second, the entrant must realize and appreciate that his position is dependent on the accuracy with which the record is made. Third, as has been said, "It is easier to state what is true than what is false."

What the court has said applies to a case when the person who made the entries on the chart is dead, insane or inaccessible; and it applies with equal force to the person having personal knowledge of the truth of the entries, and who, at the time such facts were fresh in his mind, furnished them to the person who recorded them, and who is at the time of the trial inaccessible.

In this day of advancement of medical science and the diagnosis and treatment of disease, hospital staffs include many specialists in different branches of the medical profession, so that it frequently happens that a patient is examined by a number of these specialists. It is the practice for them to dictate their observations to stenographers, who in turn convey this information to the person whose duty it is to keep the chart or record of the patient's case. If, in order to introduce the evidence contained in the chart, each of the specialists, the result of whose examinations made up the chart, were required to be present in court and testify to the truth of the particular portion of the chart made as a result of his examination, there would be a practical denial by the courts of such evidence as is contained in the charts.

This court is not to be understood as holding that everything contained in the chart in question would be proper evidence, but its decision on this point is confined to determining that the objection to the admission of the chart on the ground of its contents being hearsay was not well taken. The chart being presented, if its contents on examination would be open to other objections, such as immateriality, irrelevancy or that it was an expression of opinion by persons not competent to express an opinion, those objections are not precluded by what this court has here said.—*Journal of the American Medical Association.*



This Northern Outpost of Modern Science Serves Large Area

By CHARLES CURTIS, M. D.

Medical Officer in Charge, St. Anthony Hospital, St. Anthony, Newfoundland

THIS year the doors of a hospital which for a quarter of a century had always stood open to receive patients from Labrador and northern Newfoundland, were closed and locked. It was the most northern hospital on the eastern coast of North America, open the entire year.

Situated at St. Anthony, the center of the International Grenfell Association and built originally by Dr. Grenfell, it had served a coast of some thousand miles and had always been crowded far beyond its capacity.

The closing of this building did not mean that the association was giving up this important link in its chain of hospitals, but that a great step forward had been made in the medical work on this coast, and that barely a hundred yards away the doors of a recently completed, steel frame, concrete block, three-story hospital had been opened.

The history of the Grenfell Medical Mission is well known and need not be repeated in detail here. It will suffice to say that in 1892 Dr. Wilfred Thomason Grenfell sailed from Yarmouth, England, on the *Albert*, a small one hundred ton hospital ship, to investigate conditions among the fishing fleets and villages on the Labrador and Newfoundland coasts.

Dr. Grenfell had been active among the deep sea fishers of the North Sea, and the Royal National Mission to Deep Sea Fishers was responsible for his appearance on this side of the Atlantic. He found that the people, most of them of English, Scotch, and Irish extraction, lived in small isolated communities along the coast, and were entirely dependent on the intermittent and necessarily hasty attention supplied by doctors arriving on the boats that periodically touched the principal villages. There was a real need for permanent medical facilities. The next year Dr. Grenfell returned to stay. Through the aid of interested supporters in St. John's, a small hospital was erected at Battle Harbour on the coast of Labrador. The following year found another, farther north on Indian Harbour Island, and in 1901, after Dr. Grenfell had spent another winter in St. Anthony, he determined to build his third hospital there. In his autobiography "A Labrador Doctor," he says of the building of the first St. Anthony Hospital: "In the early spring an expedition into the woods was arranged, with 100 men and thrice as many dogs. We camped in the trees and at the end of a fortnight came home, hauling behind us material for our 36 x 36 feet

hospital. We were quartermasters and general providers. Our kitchen was dug down in the thick woods through six feet of snow."

This hospital consisted of a small ward for men and an equally small one for women, an operating room, a dispensary, a kitchen and three staff rooms. Oil stoves were needed to supplement a small furnace in an excavation under one part of the hospital. All water was brought in buckets and barrels from the spring, and the one bathtub was filled by hand. The lighting was by kerosene lamps.

The installation of the electric light plant in 1908 was a great advance, and the same year Dr. John Mason Little, who was doctor in charge, greatly enlarged the building. The wards and kitchen were enlarged, and a new operating room, sterilizing room and six staff rooms were added. Soon, other advances were made. Plumbing was installed, heating was changed from hot air to steam, and then a sun room and two open-air porches were built, to be followed by an x-ray room and laboratory.

Original Building Inadequate

The building took on new wings and additions, but still retained most of its original discomforts and inconveniences. It was a frame building built of green wood, and consequently after aging was not watertight. During driving rain storms, water would seep in at the windows, and drip from the ceilings, necessitating constant mopping, and these cracks would, in the winter, allow zero winds to compete with the efforts of the small furnace to heat the wards.

The cellar, which was nothing more than a pit dug in the ground under the building, was too small for the boilers. The only access to the cellar for coal and ashes, other than through the hospital proper, was a small chute, barely large enough for a man on his hands and knees. Drainage was so poor that water flooded the basement to the height of the grates and put out the fires, and in the Spring, in March and April, men would be employed pumping to keep the cellar clear. Sewerage was a constant problem, not only because the drains and waste pipes all over the building became clogged, but because the main sewer would "back up" and flood the cellar.

The daily inconveniences were too numerous to mention. A single narrow staircase made the taking of stretcher patients up or down a matter of almost acrobatic skill. Connected with the operating room was the sterilizing room, where sterilization was done on kerosene stoves, and the poor ventilation, added to the combined fumes of burning kerosene and ether made operating ex-

tremely difficult. The staff living and dining rooms being on the first floor, wards on the second and staff bedrooms on the third, with thin wooden floors between, the mutual disturbance of staff and patients was unavoidable.

All through the summer months the small hospital was crowded far beyond its capacity. The periodical mail boat, discharging a large number of patients when there was scarcely an empty bed, added to the daily problems of care, feeding and management. It was not unusual to find sixty, seventy, and eighty patients in a building intended for forty, some sleeping on chairs, benches, tables and even on the floor of the reception room, on the examining table, in the dentist's chair in the dispensary and even outside the hospital in temporary tents.

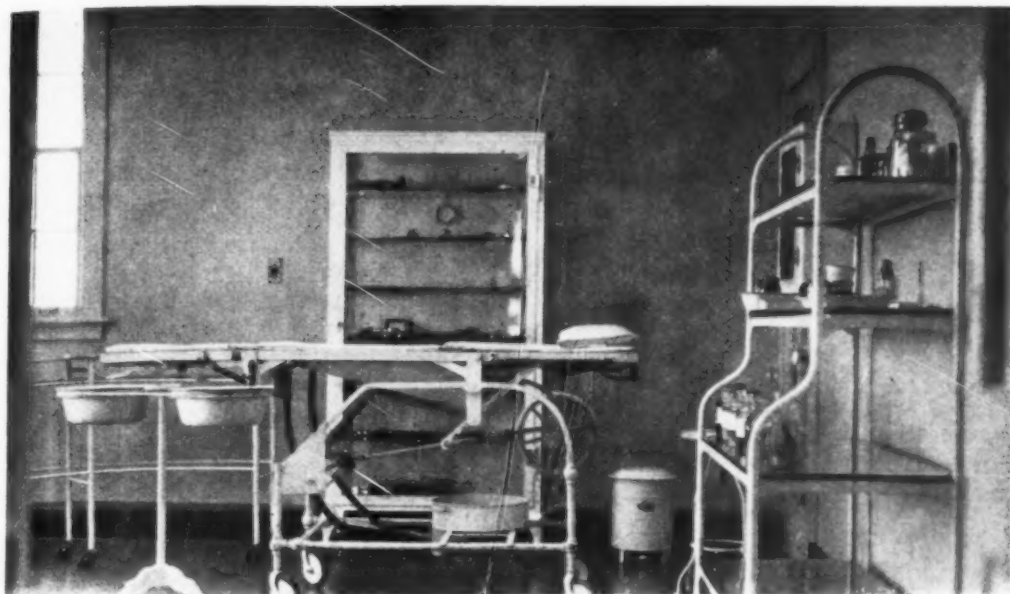
Conditions in 1914 were such that it was impossible to meet the situation in the old building. Dr. Little, surgeon in charge, prepared a paper outlining in detail the need for a new hospital, and Dr. Clarence Blake, president of the New England Grenfell Association, tried without success to interest a large foundation in America. Nothing was done until the fall of 1924, when the directors of the International Grenfell Association, aware of the urgency of the situation, decided to borrow money to build a new hospital.

The initial purchases were made, and the man who was to have the supervision of the construction, a Labrador man who is a graduate of Pratt Institute, Brooklyn, N. Y., went to New York to confer with the architects. He carried with him plans which Dr. Charles S. Curtis, doctor in charge, had prepared, outlining the needs of the situation. He returned in May, 1925, and in five days ground was broken.

Labor Supplied by Local Men

By October of the same year, the basement had been excavated, the steel frame for the entire building erected and covered, all basement floors and walls, first floor walls, and first floor slab were finished and enough concrete blocks made to complete the building. A stone crusher on the site supplied the necessary gravel, and sand was brought from Labrador, from North West River and from Forteau by steamer. Labor was supplied by local men, and every summer a crew of ten or twelve volunteer American college students helped.

During the following winter, the main steam and water pipes were installed in the basement, and all the necessary windows, doors and woodwork were made in the nearby machine shop. In the spring of 1926 a steamer was chartered to bring the remainder of the supplies, another boiler



The operating room at St. Anthony's Hospital. The room faces northeast and light is supplied by an overhead skylight or a battery of electric lights.

and hospital equipment from New York, and that summer the building progressed rapidly, the exterior and most of the interior work being completed before the cold weather set in.

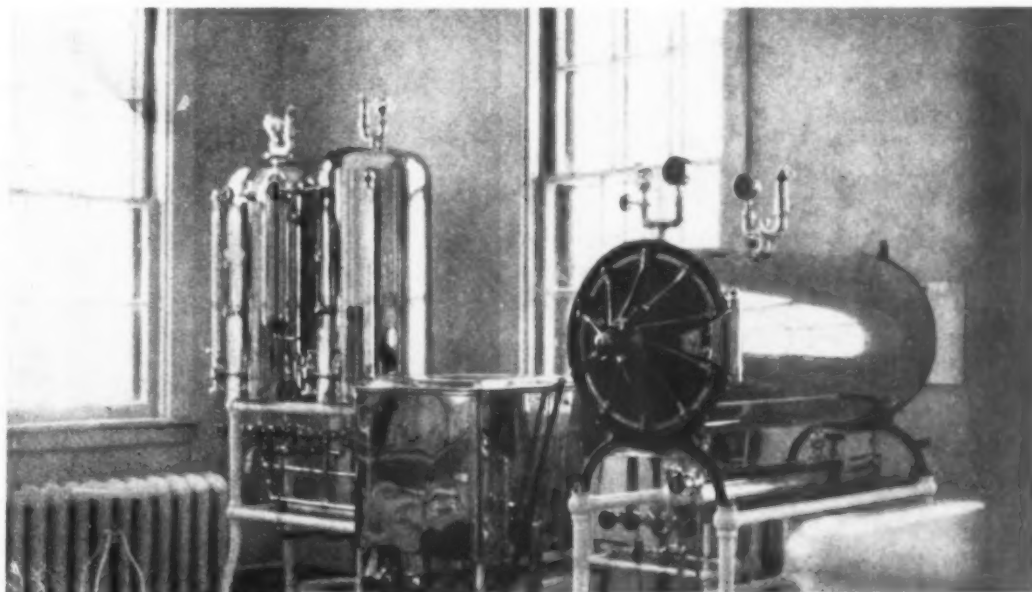
The hospital was finished by January 1, 1927, except for painting, but owing to several unavoidable delays moving was postponed for several weeks. On January 27 the thermometer marked twenty-five degrees below zero. As soon as the early lunch for the patients had been cooked, the large kitchen range was dismantled and the moving began. Stretcher followed stretcher between the two buildings, and barely an hour later every patient had been moved and was safely in bed. Staff furnishings, operating room and dispensary equipment followed. The kitchen range was installed, and by five o'clock the patients were eating their supper.

The building was designed to separate as much

as possible the staff living quarters from the hospital proper. The former are in a three-story building with basement, a closed-in sun porch running the entire depth of the building. Directly connected with this is the hospital, a two-story and basement building so constructed that, viewed from the exterior, the two wings are apparently one building. On the interior there is no visible division, but the old annoyance of mutual disturbance of staff and patients is eliminated.

The boiler room is separated from the main building and there is free and easy access to it from the outside. Another of the old problems, that of heating the hospital, is adequately met by two eight-ton locomotive type boilers. These boilers are equipped with a smokeless fire box, the smoke by a special system of drafts passes through the fire over a bed of coals to the main outlet, resulting in perfect combustion with little

On the right is the sterilizing room. There is a battery of sterilizers, consisting of sterilizers, instruments and dressings, equipped with hot and cold sterile water.



gas and smoke. These boilers not only supply high pressure steam of from forty to sixty pounds for the various sterilizers, of which there are four, but by a reducing valve from the main boiler, supply low pressure steam for heating the building. The vapor vacuum system is used and there are modulating control supplying valves and thermostatic regulative return valves on each radiator in the building. This insures a uniform and adequate temperature. The boilers also heat a 500-gallon tank of water, automatically controlled by thermostatic element in the tank to supply the taps. There is also a large built-in incinerator in the boiler room for burning all garbage and refuse. The adjoining coal pockets hold a year's supply.

In the basement proper, the modern laundry is complete with washers, mangles and extractors for drying. A clothes chute delivers soiled articles from the floors above direct to the laundry. Adjoining the laundry are two large drug rooms and the janitor's room, and next a set-in-the-wall sterilizer for the bedding and mattresses of infectious cases. It can be used with either steam or formaldehyd.

The kitchen is used only for the preparation of food, none of which is actually served here. Each ward has its own diet kitchen from which containers are sent in dumb-waiters to the main kitchen, where they are filled with the cooked food and returned. These containers are fitted into asbestos lined food conveyor trucks, which are wheeled to the patient's bedside where the food is served into the dishes. By this arrangement meals are quickly served and hot food is not chilled by being carried long distances on trays through corridors. All dishes are washed and stored in the diet kitchens, and only the actual pots and pans used in the cooking are washed in the kitchen. For this purpose there are two large galvanized iron sinks, with separate compartments for washing and preparing vegetables.

Ample Storage for Winter's Supplies

The maids' dining room adjoins the kitchen. Three large storerooms hold the winter's supplies. The refrigerating room is separated from the main building, and is equipped with an outside chute for ice. The x-ray and dark rooms are also on this floor, and are complete with modern equipment which includes a portable machine for use in the wards. The remainder of the basement is given over to a splint room, autopsy room, trunk room, battery charging room, and large linen storeroom. Every room in the basement has outside light, and the floors are painted concrete.

Two flights of stairs lead up from the basement, one at the rear of the building, and the other joins the main staircase at the entrance, where a door separates the staff living quarters from the hospital proper. The former consists of two offices, one for the matron and the other for the doctor in charge, a large clothes closet and a diet kitchen with closets. The staff dining room is on the south side of the building and is consequently flooded with sunlight. Adjoining is the living room with a large fireplace, and beyond, a long sun porch 40 by 12 feet, which is made extremely attractive with brightly colored cretonne curtains and cushions, wicker lounging chairs and full length reclining chairs. The advantages afforded by the separation from the hospital and the attractiveness and comfort of these rooms make them a place of real enjoyment and rest for the staff. Upstairs there are ten bedrooms for nurses, and the usual facilities, which include a shower bath. The third floor consists of ten maid's rooms, bath with shower, two linen closets and a sewing room.

Wards and O. P. D. Occupy First Floor

The first floor of the hospital proper is given over to wards and the out-patient department. To the right, is a large reception room, closely connected with the dental room, dispensary and examining room; on the left is another diet kitchen and linen closet for the wards on this floor. The laboratory is complete with bacteriological equipment, incubators, microtome and carbon dioxide cylinders for pathological work. There are also two bedrooms for the house officer and a bath with shower attachment.

The wards are situated at the southern end of this wing. There is a large twelve-bed ward with bath, and two smaller wards, the latter called the Dalzell Ward, after Jean Dalzell, who died while on duty in St. Anthony, October, 1925. There are also two sun porches for tubercular patients, equipped by the Canadian Labrador branch of the Grenfell Mission. Beyond is a large veranda.

The second floor is similar in arrangement to the first. A large diet kitchen, linen closet and patients' clothes closet lead off from the main corridor, and are easy of access from the wards, of which there are two, with baths. The utility rooms, there being one for every ward, are a great convenience, with large soaking sinks, rim flushing slop sinks and bedpan racks. On this floor is also a small two-bed isolation ward. At the south of this wing, directly over the first floor sun porch, is another sun porch where patients can be wheeled during the day and literally bathed in sunshine. The Philadelphia branch of

the International Grenfell Association gave \$10,000 for this solarium.

The operating suite is separated from the main building by a corridor with swinging doors. This suite includes a recovery room, and an anesthetizing room. The sterilizing room is next, and a battery of sterilizers, consisting of sterilizers for basins, instruments and dressings, are equipped with hot and cold sterile water. These are also directly connected with the power plant in the basement. This room contains also a large plaster sink with an especially designed trap for waste plaster. Connected with this room is the orthopedic room, fitted with a table for applying plaster casts. Across the corridor is the operating room, but between it and the sterilizing room is a scrub-up room for doctors and nurses. The operating room faces northeast. The light is supplied by an overhead skylight or a battery of electric lights. There are also wall plugs for electro-surgical appliances and a portable x-ray machine. Instrument cases are built into the wall and the floor is painted concrete. The equipment of the room also includes a lamp for electric therapeutic treatment. Throughout the building, a call system connects each patient with the nurse's station.

The electric current is carried to the building through underground conduits from the power plant where two fuel oil burning engines are in use. There are no exposed light wires in the building, these being encased in conduits concealed in the slab. Water pipes are also concealed.

Building Is Fireproof

The building is entirely fireproof. The exterior walls are of eight-inch concrete blocks made on the site. The steel frame was bolted on the site. The columns are encased in cement. The stairways are of concrete. The floors are six-inch reinforced concrete with gray linoleum cemented to the slab. The walls are cement plaster, and the ceilings finished with calcine plaster. The wards south and west, the sunny sides of the building, are painted greenish grey, and corridors, reception and treatment rooms, on the darker sides, are finished in light buff, with grey linoleum floors. The central drainage of the roof of the hospital wing is accomplished by a six-inch slope to the center, where leaders carry water down through the building to the main sewer.

Delano and Aldrich, New York, were the architects of the building, and not only gave the plans, but arranged for the purchasing of the material. The electrical systems, plumbing and water plans were drawn up by French and Hubbard, Boston, and were the gift of Hollis French of that firm, the vice-president of the New England Grenfell

Association. The money was raised largely in America, the finished building costing over \$130,000. The largest single contribution was an anonymous gift of \$50,000, made at Christmas, 1925. The people of St. Anthony and the vicinity contributed over \$2,300, raised by sales and fairs, besides giving several hundred days of free labor.

This is not a hospital in New York or London built and maintained by a large endowment fund, but the most northern year-round hospital on the eastern coast of North America, built by money raised by voluntary contribution for the purpose. The labor was supplied entirely by local men, some few of them trained in the States, but the majority fishermen by trade, rather than painters, masons and carpenters. As it is situated 1,800 miles from New York, and four days by steamer from St. John's, all the problems of construction had to be solved without immediate access to a source of supplies.

Climate Was Chief Difficulty

One of the chief difficulties was the climate, which is subject to a change of from eighty degrees in summer to twenty or thirty degrees below zero in winter. All joints, seams, walls and ceilings had to be thoroughly waterproofed to withstand driving rain, high winds, drifting snow and prolonged frosts.

The hospital at St. Anthony operates not merely as a local unit but as a base from which medical facilities are supplied to over two hundred miles of the coast of northern Newfoundland. This is accomplished by periodical trips by boat in summer and by dog teams in winter, of doctors, dentists, nurses, child welfare and industrial workers. Visits are made to isolated villages and small clinics are held along 120 miles of the western coast, and 100 miles of the eastern coast of Newfoundland. Several outlying nursing stations are also under the supervision of St. Anthony, and at these, such as at Flower's Cove on the Straits of Belle Isle, a trained nurse and her companion, a welfare and industrial worker, care for the immediate needs of the people and can also take care of the obstetrical cases.

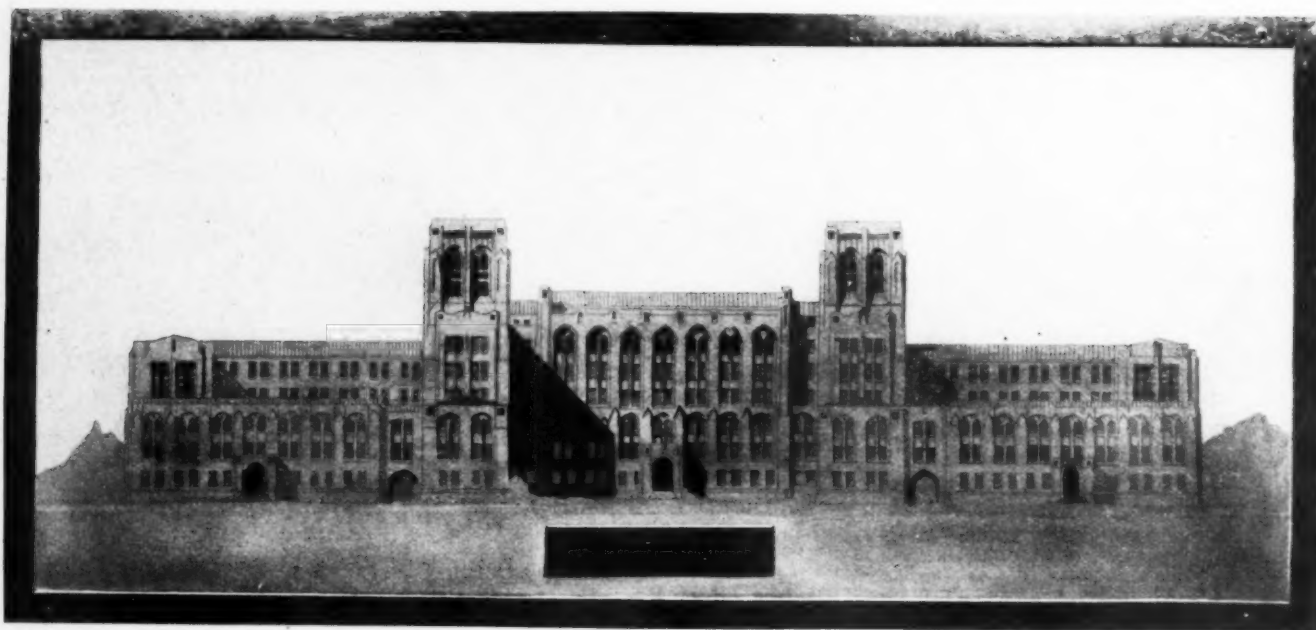
During the summer months clinics are held at St. Anthony by orthopedic and ophthalmic specialists from the United States, England and Canada. These clinics form an important part of the medical work on these coasts, as a large proportion of the cases are nutritional ones, with the usual resultant deformities and complications.

Since the first small hospital was built in St. Anthony, 6,000 in-patients have been treated in the wards and over 2,000 a year in the out-patient department.



A model of the Billings Memorial Hospital, Chicago, (center) made of nearly 700 pieces of reinforced rubber, inlaid into the design.

The reception room of the hospital



The inlay was made in the laboratories of the Stedman Products Company, South Braintree, Mass., and presented to Dr. Ralph B. Seem, the director of the hospital.



One of the wards

Problems That Confront Hospital Administrators Today*

HOW to reduce costs and charges appears to be one of the outstanding problems to be met by hospital administrators in 1928, judging from the place that this problem has been assigned by several leading superintendents and directors of hospitals who have given it preference in the following symposium.

The demand for better rural medical service, hospital insurance rates, the training of hospital executives, winning the support of the community for the hospital, and the education of nurses, are other aspects of hospital work that demand thoughtful consideration in the near future, according to the opinions expressed herewith.

Consider the Chronic

"There has been much but not enough said and done in regard to the problem of securing adequate treatment for the chronically ill," says Dr. Joseph C. Doane, president of the American Hospital Association, who gives the leading place to this problem. "The acute hospital does not want these cases. Indeed, it is not equipped or justly entitled to care for these patients. Moreover, the young receiving ward physician has been so drilled in avoiding the admission of probable long-time cases, that they appear to him as something to be shunned.

"It has become the style for the hospital to boast of each bed's serving two or even three patients a month. But are these patients justly and efficiently served? Is there not a danger of producing chronicity by inordinately speeding the departure of the acute case from the hospital?

"Not the least important phase of this problem is the decision as to the type of building necessary for the adequate care of the chronic. Surely a less elaborate style of architecture is required than that necessary for the modern care of the acute infections. And yet men and women die just as often from long, difficult illnesses as from acute and more dramatic conditions. Are we stressing the care of the latter at the expense of the former? What can the organized hospital field do to improve the conditions of the chronically ill in rural districts, where their only haven is the inefficient and often physically and politically unclean almshouse?

"And why should not hospitals more boldly grasp the problem of pensions for faithful but aged employees? The problem has its difficulties but these are surely not insurmountable. A half-hearted, overcautious approach will never bring about its solution.

"Once there is a general acceptance of the existence of a moral obligation on the hospital's part to these workers, a long stride will have been taken toward answering this question and solving this problem.

"A decision as to the existence or nonexistence of unfairness in hospital insurance rates is another problem that confronts the field and its component institutions. Does this rate reflect an unjust attitude on the part of insurance companies, or a lack of care by hospitals in preventing or removing fire risks? It is not beyond the bounds of reason to suppose that both conditions exist.

"To secure data on this subject, hospitals should learn whether their current fire insurance rates can be lowered by removing existent and sometimes easily remedied defects.

"Finally, in 1928 each hospital should make certain that along with its development in scientific attainments should go an increase in that fine possession—hospitality. Science must be cold and calculating, but there is room in every institution for the maximum of this quality, as well as a bounteous supply of friendliness. Each is necessary to the other."

Financial Problem Is Outstanding

Frank E. Chapman, director, Mount Sinai Hospital, Cleveland, sums up the outstanding hospital problems of the year 1928 in one word—"financial." He says: "The increasing hospitalization of members of a community, the greater understanding of what constitutes complete hospital service and the increasing professional demands, which create a more complex hospital procedure—all must be considered in evaluating the increased cost per day of service for hospital care.

"The financial problem of a hospital centers in its entirety around the part-pay patient. There is a certain percentage of patients in any community who can pay an unlimited patient day cost. There is, of course, the free patient. The problem of the free patient is universally accepted

*Further discussion of 1928 hospital problems will appear in the February issue.

and in general is being met, but the problem of the part-pay patient, with the increasing difference between his ability to pay and the actual cost of the service rendered to him, is a problem requiring a new philosophy of finance, necessitating new avenues of subsidy for hospital operation.

"There is a growing acceptance on the part of governmental bodies of their responsibility in the care of the sick, and it seems proper to include as a further problem a study of the county hospital, to the end that governmental hospitals, irrespective of the body politic operating them be operated with an understanding of modern hospital practice, and its obligations."

"I hardly know what opinion to express with reference to outstanding hospital problems requiring solution during 1928," says Dr. A. C. Bachmeyer, superintendent, Cincinnati General Hospital, Cincinnati. "We are, of course, continually confronted with the problems arising from the high cost of hospital service, and it is no doubt one of our obligations to analyze all of the factors producing this high cost and endeavor so far as is possible to introduce measures to reduce that cost. At the same time we must recognize that salaries are higher than they were some years ago and that a greater number of people are able to buy hospital service today than was formerly the case."

"I also look upon the establishment of county and district hospitals as offering a solution to the problem of rural medical service. I believe that our endeavors should therefore be directed toward the establishment of more of these institutions so that we may not only bring hospital service closer to the source of the rural demand but that we might also make available to the rural practitioner the equipment he requires in his practice."

"These in my opinion seem to be two important items that should be included in a program of progress for 1928. So far as our large urban districts are concerned, it seems to me that a better correlation and interrelation of dispensary, hospital and public health service is indicated and that programs for the correlation of these efforts would redound to the benefit of the public."

Service for the Middle-Class Patient

The provision of hospital service to people of moderate circumstances at a rate that they can pay is the outstanding problem for the year 1928, according to Dr. R. G. Brodrick, Stanford University Hospitals, San Francisco, who states: "One solution might be the development of semi-private rooms, another, simplified methods of procedure and possibly the elimination of private duty nurses by substituting group nursing or more adequate general duty nursing."

"Another important subject that should receive consideration in the future is the proper training of hospital executives. Although there are many applicants for positions, it is generally found extremely difficult to find the proper person to fill the responsible position of superintendent of a large hospital."

"Another subject that should receive serious consideration during the coming year is the one of providing adequate accommodations in all general hospitals for the care and treatment of acute communicable diseases, tuberculosis and mental diseases. In other words no hospital should be considered to be a general hospital unless provided with properly constructed, equipped and organized isolation departments and psychopathic departments."

Many Major Problems Listed

Dr. M. T. MacEachern, associate director, American College of Surgeons, Chicago, summarizes concisely the problems that should come before the hospital field during 1928. He believes them to be as follows:

The development of a greater consciousness of service to the patient amongst all the groups concerned with hospital work.

The better establishing of the status of the superintendent of the hospital, particularly in relation to the board of trustees and medical staff.

The promotion of closer cooperation between boards of trustees and medical staffs.

The promoting of better ethics as related to hospital and medical work, with particular reference to fee splitting and unethical publicity.

The prevention of the extensive turnover in hospital personnel, particularly superintendents.

The better regulating of charity as related to hospitals.

Hospital financing, particularly as related to costs, charges, budgets and cost accounting.

The better standardizing of hospital planning, construction, furnishings, equipment and supplies.

The better meeting of the need for trained hospital executives and personnel.

More careful consideration of the extending of privileges to doctors to practice in hospitals, and the making of staff appointments.

The better organization of medical staffs, particularly in open hospitals.

Better supervision and control of clinical work in hospitals, particularly in the so-called "open" type.

Better staff conferences, providing a more complete, systematic review or analysis of the clinical work of the hospital, at regular intervals.

The provision of adequate medical supervision

for clinical laboratory, x-ray and other diagnostic departments.

The improvement of administration of anesthesia in hospitals.

The prevention and control of infectious or contagious diseases in the wards of general hospitals.

Increasing of the number of autopsies, in accordance with the requirements of the Council on Medical Education and Hospitals of the American Medical Association.

The better care of traumatic or injured patients.

The promotion of follow-up and study of end results in hospital work.

Further development of physical therapy.

The improving of case records in hospitals.

The better care of chronic and incurable patients.

The care of psychopathic and tuberculous patients in general hospitals.

The provision of an adequate nursing service for all classes of patients in hospitals.

The better organization and administration of outpatient departments.

The extension of social service activities in hospitals.

The better organization and functioning of dietary departments.

The development of administrative, technical, and service minimum standards in hospitals.

The promoting of community relations and community interests as related to hospitals.

Endowments Are Needed

The securing of large endowments is the main issue on which Dr. L. A. Sexton, superintendent, Hartford Hospital, Hartford, Conn., would have hospital administrators concentrate during the coming year and all years that follow. He says:

"One of the difficult problems confronting every hospital administrator is to sell the hospital to those whom it serves. This must, of course, be done during the patient's sojourn in the hospital and may be done in a variety of ways, but our job is to convince the public that the hospital is theirs and that we are doing the best we can to run it for them.

"There is no time so appropriate for this task as when the patient is on his back and dependent on the hospital and its staff for restoration to health and happiness. At no other time are people so easily influenced or impressions so lasting. About half of the patients who go to hospitals each year have never been sick in a hospital before, and it is upon this half that our efforts should be concentrated. This is assuming, of course, that those who have been admitted pre-

viously have been properly handled and cared for.

"There is no middle ground upon which discharged patients may stand—they are either for you or against you, and there is no topic of conversation upon which they dwell so long and so loud as their respective operations and the care they received while at the hospital, be it good or bad. In view of everyone's weakness on this particular subject the administrator who fails to capitalize it loses his greatest opportunity of attack on the patient's most vulnerable point at the most opportune moment.

"At no other time in a man's life does a smile, a kind word or kind deed mean so much. A little individual attention shown each patient at this time will make a vast difference in the amount of your endowment a few years hence. If your endowment is sufficient all of your other problems of whatever kind are easily solved."

Foster Community Relations

"The subjects that appear outstanding as hospital problems to my mind, are as follows," says C. J. Cummings, superintendent, Tacoma General Hospital, Tacoma, Wash.:

"Hospitals should recognize the tendency toward greater appreciation and understanding of hospitals on the part of the public and do all they can to foster it.

"As we have come to the realization of the need for better educated nurses we have also become confronted with the problem of better financing for our schools of nursing. How is this to be done? Shall it be by endowments or is it up to the hospitals to educate the public, to show them their obligations regarding the health of the community and the education of the nurse?

"The medical staff of each hospital should be definitely required to attend monthly staff meetings. It is recommended by the American College of Surgeons that hospital cases of interest be reviewed and that all deaths be reported and discussed. Those hospitals that are successful with their programs should make them known.

"Every hospital administrator should look forward to the time when his institution is recognized not only as a center for the treatment of the sick, but as a medical education center where physicians of the entire neighborhood will be students in a great cooperative school, and day by day will increase their skill and knowledge."

Emily L. Loveridge, superintendent, Good Samaritan Hospital, Portland, Ore., is among those who feel that finance is the hospital's main problem, and states that the difficulty lies in making an adjustment between income and expense accounts, so as to give the best service to all classes

of patients and be just to all classes of employees.

That the primary problem confronting the hospitals of the country centers around the establishment of a better understanding of the hospital on the part of the community it serves, is clearly brought out by Dr. John D. Spelman, superintendent, Touro Infirmary, New Orleans, La., who analyzes the situation as follows:

"There has not yet been presented a rapid road to the education of the public in this matter, and it will therefore probably remain for some years the definite responsibility of hospital administrators as well as hospital associations to educate the people on the general subject of hospitals.

"Generally speaking, everyone expects that perfect hospital service will be in readiness in case of illness or accident. With less than this, no community should be content. But too seldom is the question asked 'how is this service created and how is it maintained?' Our public buildings, our school systems, our streets and our fire houses are accepted as a matter of public responsibility and financed by taxation. The public must accept the fact that hospitals will not exist and progress unless the community provides the means through voluntary support, on the basis that the personal need for adequate hospital service carries with it a corresponding responsibility on the part of every member of the community.

"Adequate support from the community is fundamental, yet there are entirely too few communities that are giving adequate support to their hospitals. Hospital administrators rather than the people of the community are at fault in this respect, and the solution of this problem will come in the proportion that effort is expended by these administrators in educating the community to its responsibilities.

Educate the Public

"Along with the problem of adequate financing, there runs the question of the people's conception of what right hospital service should be. That 'a hospital is as good as the community which it serves demands that it shall be,' is just as true now as it was the first time this statement was uttered, and it is the responsibility of those who have the vision to expound the ideals of service. Then there will come a better understanding of the support that hospitals should receive.

"Hospitals need to understand better the problems of the individuals who seek their service as well as those of their relatives and friends, so that patients may leave the hospital with the feeling that the hospital has a heart. The best practices in hospital procedure do not suffice, the institution must be humanized.

"There must also be met the problem of dispensing hospital service to people of varying ability to pay the cost of service. This phase of the problem is being much discussed today. It seems to me that charity today consists in giving the individual what he requires and charging for the service that which he can pay.

"Finally, there will exist in 1928 the desire on the part of every hospital that wishes to have each year stand as a milestone of progress, the desire to develop better coordination and better teamwork. Running a hospital is like rowing a boat up stream—you must go forward or you will go backward. The hospital is a complex organization, its product is created by the activities of many and variously trained individuals. The contribution of each cannot be efficient unless the relationship of the individual contribution to the whole is clearly understood. Every opportunity should be utilized to give as much perspective as possible to all concerned and, above all, there must be instilled in the hearts of each that incentive that comes from the desire to serve."

Money Is Needed

"The fear of being considered mercenary keeps most of us from admitting that our greatest problem is how to get our hands on more money," says Ada Belle McCleery, superintendent, Evanston Hospital, Evanston, Ill. "Consequently, we try to cover up our deep desire by such flowery phrases as expansion, higher grade scientific work, lower charges—all of which require money.

"The hospital incorporated not for profit has three sources of income: interest on endowment, gifts and earnings.

"Probably endowments would grow and gifts increase if the public understood better our needs, but, after all, endowments grow slowly and gifts vary from year to year. No hospital can rely on an uncertain income.

"One may think that earnings cannot be increased and perhaps they cannot, but it is worth while to ask oneself such questions as: Are charity cases investigated? Are questionable accounts followed up? Are the costs of a service considered in setting a price for same?

"Fortunately, there is another way of increasing money on hand, and that is by controlling the expenditures. Are purchases made on quality or price basis? Is the buyer influenced by the personality of the salesman? Are stores controlled adequately? Are broken and torn articles repaired before reaching the hopeless stage? Is the exchange method employed? Is food waste watched? Is garbage inspected? Has the cause of labor turnover been analyzed? Is hand labor

utilized where machinery should be substituted?

"These suggestions are made to stimulate each one to look about his own bins and corridors to see if he cannot pick up a little of the money he needs so badly. After all, the hospital world can solve its problems only by the individual hospital examining its own peculiar problems one by one, and not being content until a solution is found."

How Can We Get Increased Efficiency?

How to get increased efficiency and general improvement in the conduct and administration of hospitals appears to Dr. Edgar A. Bock, superintendent, Colorado General Hospital, Denver, Colo., to be the outstanding problem to be faced and met in 1928. He says: "Obviously such a problem is a stupendous one, but to hospital administrators it should be reasonably clear that this matter demands serious thought when cognizance is taken of the many indications of administrative inefficiency that appear, particularly in the smaller institutions of the country. The business conduct of many institutions warrants intensive study. The professional proficiency of an institution may be, to a great extent, judged by its administrative efficiency. A hospital operating in a businesslike and smooth manner, managing its available resources economically, collecting its accounts punctually and generally operating along the modern lines adopted by successful business corporations, may be expected to give the best professional care to its patients.

"On the other hand, institutions poorly organized, with easy going and antiquated administrative systems, may pretty generally be expected to follow the same customs and practices in their professional relations with their patients. Therefore, I consider it important for hospitals to disseminate propaganda, to institute all known educational methods and to bring into play every available endeavor to induce the ever increasing number of new institutions to apply to the conduct of their organizations those well-known and proved principles of business efficiency that are common throughout the industrial world of America today."

Robert Jolly, superintendent, Baptist Hospital, Houston, Texas, feels that the outstanding problem is how to meet operating deficits, and makes the following suggestions for overcoming this difficulty: "I notice that the National Laundry Association and other national industrial associations are combining to advertise their businesses. I am wondering if it would not pay our hospitals to pool enough money to do some intensive advertising to enlighten the public and to stimulate gifts to hospitals. I think that the Christmas

season would be the time to focalize this effort. Of course, it would take considerable money but I believe with enlightened advertising we could thus cause the people of each community to turn their attention to the overwhelming needs of the hospitals. We must have endowments or donations.

"The next great problem that ought to be solved is that of educating the nurses. Dr. May Ayres Burgess is getting some fine information together that will be helpful for the Committee on the Grading of Nursing Schools. This committee will need great wisdom in order to solve this problem so as to benefit all the hospitals. I feel that sometimes people living in one portion of the United States look through a microscope instead of a telescope. It is easy for us to become provincial. One fine result of our conventions is that they bring us together and let us discuss mutual problems."

Why So Many Vacant Beds?

Among the problems to be grappled with in 1928 Dr. B. A. Wilkes, superintendent, Missouri Baptist Sanitarium, St. Louis, places the problem of the vacant bed. He states:

"The vacant bed in a hospital is a liability, and an average of 30 to 40 per cent of vacancies is too great an expense for any hospital to carry. We are either not giving the right kind of service, our buildings and equipment are too costly or the hospital charges are beyond the reach of the great masses of the people.

"Hospital organization is constantly on the increase. This includes labor, equipment and furnishings. If we are required to lower our per capita charge to patients, with the increased cost of operation it seems that the hospital would necessarily be compelled to draw largely on the community chest fund or some other charitable organization, if it is not heavily endowed. Endowment seems the best safeguard for the hospital, but few of the wealthy philanthropic men and women remember the hospital in their magnificent bequests.

"I fear sometimes that we are progressing in our hospital activities more rapidly than we are educating the public in the necessity for hospital care and in the importance of the hospital as a community asset. In our supreme effort to meet all demands in hospital service, we are in some danger of losing sight of the human side of our service to the sick.

"Too much organization is useless and costly. To reduce our pay roll, decrease the number of departments and produce better and more efficient hospital workers will do much to help in solving many of our hospital problems in 1928."

STUDIES ON HOSPITAL PROCEDURES

Studies in the Prevention of Hospital Accidents

AN ACCIDENT has been defined as an unforeseen or unexpected event. The hospital administrator of experience is not inclined fully to believe the old adage that "there is nothing new under the sun," for he has observed that new ways develop every day by which the peace of mind and safety of body of his patients may be endangered. Indeed while not actually superstitious some hospital administrators have come to believe that accidents occur in groups of three. Strange as it may seem, it is not rare to hear a hospital administrator remark after the occurrence of one institutional accident, that he wonders what the succeeding two will be and when they will occur.

The hospital is fully responsible for the safety of its patients, from the time they are admitted until they depart. Not only is the hospital in duty bound to protect the patient from injury to his physical body, but to safeguard his mental tranquility is just as necessary.

Accidents may be of several types. Hence the hospital's preventive efforts must touch a wide scope of activities. These include the protection of the patient from accidents relative to the administration of drugs. This applies to mistakes either in the type of drug or the size of the dosage. He must be prevented from falling from heights and protected from injury from heat and electricity.

Not only is the hospital responsible for the welfare of the patient, but also for the prevention of injury to visitors and to workers within its walls. The subject, then, naturally dissolves itself into a discussion of the prevention of accidents, in so far as they affect the patient, the visitor and the hospital employees.

Reference has been made to accidents that do harm to the patient's peace of mind. The hospital superintendent will do well to consider that injuries of this sort—damage to the mental fibre—are oftentimes far more deep and difficult to heal than those affecting the physical tissues.

For an apprehensive patient to overhear a dis-

cussion by physicians or nurses of the prognosis of his case, is a serious accident indeed. For a nervous ward patient to be placed beside a delirious man or woman, and to be kept there over a period of hours or days, may do much damage to a sensitive nature. When such a patient is required to view the removal of the body of a patient from a ward, the same sort of damage may be done. To allow the harrowing details of the sickness of certain types of cases to be discussed in the presence of a patient who is already greatly concerned relative to the outcome of his own condition, may not always be truly accidental, because it may only be actually thoughtless and hence, preventable. When a fearful patient is required to occupy the same elevator with an ether patient returning from the operating clinic, or with a body being removed to the morgue, damage to the mental make-up is probable. Such occurrences are unpardonable.

What has been said of the above occurrences in regard to thoughtlessness or carelessness being often responsible for such hospital accidents, cannot be said with equal truth relative to accidents affecting the patient's physical condition. Such accidents result from lack of foresight, of expectation, but always to provide the necessary preventive measures is next to impossible. Perhaps one of the chief dangers, and hence it will be discussed first, to which the hospital patient is subject, is the possibility of mistakes in the administration of drugs. Nor does this always result from errors in the computation of dosage or from the misinterpretation of orders. Sometimes a mistake is one of omission rather than of commission, in which the patient plays an active instead of a passive part. If the nurse places a dangerous drug within reach of a delirious or psychopathic patient, she is no less culpable than if she administers an incorrect dose.

Avoid Verbal Orders for Medicine

In the first place, it may be said that no verbal orders for the administration of medicines should be carried out by the nurse except under the greatest emergency. This is a difficult rule to enforce, since often young physicians cannot understand why it is unsafe for them to give orders over the telephone, and, hence, why they should be incommoded to the extent of visiting a ward or room, when it is merely a matter of prescribing a drug no more harmful than a laxative. On the other hand, in the long run, strict adherence to this rule may be life-saving.

As a second general principle, no drug should ever be given to a patient for self-dosage. Serious results have occurred because a seemingly intel-

ligent patient was permitted to administer his own medicine.

Again, the administration of one drug in mistake for another has resulted disastrously. This is particularly true where drugs have similar sounding names, or where bottles in a ward medicine closet become interchanged. Cocain has been administered for novocain in the performance of nose and throat work, with the result that a patient has lost his life thereby. Barium sulphid has been administered in x-ray work when barium sulphate was intended. Calcium oxalate, the appearance of which simulates magnesium sulphate, has been given for the latter drug.

Indeed, the growing use of certain coal-tar headache tablets, seems in a few instances to have been responsible for the fatal ingestion of bichlorid of mercury.

Accidents from Wrong Dosage

With still greater frequency, mistakes have been made in the administration of drugs in the wrong dosage. The signs for drams and ounces have been mistaken by nurses, and drams have been given instead of minims. Fowler's solution, which contains arsenic, and which may be given in from 1-15 minim doses, has been administered in 1-3 dram doses with disastrous results. Eserin salicylate, which is usually prescribed in 1/40 grain doses, has been given in 1/4 grain doses.

Examples of the specific drugs that have given rise to mistakes in dosage could be greatly multiplied, but sufficient have been set down to illustrate the type of mistake usually made. The location and arrangement of the ward drug closet, as well as its make of lock, are of the greatest importance in preventing mistakes in dosage and in type of drug. In the average commercial drug store the pharmacist and his assistants are able to locate certain frequently used bottles with closed eyes, so definite a shelf space has been assigned to them. In the ward drug cabinet, such a system should be adopted.

In other words, a general standardization of drugs that are to be kept in the specific cabinet, as well as the adoption of particular types of bottles, is advisable. The added precaution of always placing the same containers in the same place on the shelf, is a wise step to adopt. Drug bottles should be plainly labeled, either by being etched or by some device that provides a label not affected by water.

It is also probably best to prohibit the storage of caustic alkalis or acids, corrosive poisons and even of opiates, in the same compartment with other drugs less likely to do damage if carelessly administered. To be sure, it is not always possi-

ble to have each drug closet contain the same type and strength of drugs, but it is practicable to have in each department a certain basic line of drugs, to which such additions as are required to meet departmental needs can be made. Psychopathic patients are sometimes able to obtain dangerous drugs that are carelessly left on bedside tables or in unlocked medicine closets.

It should be remembered that even in a general hospital patients must be protected from themselves. Persons addicted to drugs are sometimes to be found in open hospital wards, and they are likely to endeavor to secure their desired drug by discovering unlocked closets or by the use of passkeys. Where the human equation enters as fully as it does in the nursing work of the institution, it is of the greatest importance to be sure that ward closets are always locked. The lending of keys to attendants or patients is a mistake, because of the possibility of duplicates being made. Even though the necessity for the locking of drug closets is carefully drilled into every student nurse, mistakes are likely to happen.

A practical consideration of the methods of prevention of drug mistakes, should, of course, cover the careful teaching of therapeutics to nurses. Even though it has been stated in some quarters that it is not necessary for nurses to know much relative to therapeutics, yet it is impossible to avoid the conclusion that incorrect orders do find their way on to treatment charts, and unless nurses are well informed in regard to dosage, no check on these mistakes is possible.

Again, mistakes may take place in the drug store. The careful compounding of prescriptions, is of course of the greatest importance. It would be useless to demand that all prescriptions be legibly written. Doctors are notoriously poor penmen. Certainly mistakes have arisen as a result of carelessness in this matter.

When Labels Are Interchanged

Then, again, prescription labels are sometimes interchanged or separated from the box containing the drug. In many hospitals, pasteboard boxes are used for capsules and pills, and the prescription is pasted on the cover of the box, the lid being attached to the rest of the container by means of a stout cord. This precaution is a useful one, particularly where the prescription is thus attached to the drug package.

Mistakes are sometimes made in the transportation of drugs from the hospital drug store to the ward closet, the prescription becoming separated from the container or interchanged with another. Usually, a messenger from the individual department or from the office of the school for

nurses calls at the hospital pharmacy, receipts for the day's drugs and upon delivering them to their destination receives a signature in return.

Comment has been made in earlier issues of *THE MODERN HOSPITAL* relative to the danger involved in intravenous medication. It may be said that more than one strength of intravenous solution should not be kept in the same closet. This statement, while not of equal importance, may be made in regard to other solutions, particularly those for external application. Ten per cent silver nitrate has been employed, instead of one per cent, in treating the eyes of the newborn infant. Drugs of the same color should, perhaps, not be placed side by side on the same shelf. Boric acid has been mistaken for sterile water, because of its being colorless and because it was placed near a bottle containing the latter.

Nurses should be taught this simple rule: "Do not withdraw the stopper of a drug bottle, preparatory to administering a portion of its contents to a patient, until you have looked twice or thrice at the label, to be certain that you have not made a mistake in removing the wrong container from the closet shelf."

Self-administration of medicine is to be condemned. It is, no doubt, necessary to teach diabetic patients how to administer insulin to themselves. As a principle, this is wrong. Practically, it seems unavoidable.

Accidents from Heat

Accidents from heat largely concern themselves with burns from hot water bottles, more rarely from immersion in hot water, from the use of electric blankets or from contact with steam pipes. In the standing order books of many hospitals the temperature at which hot water bottles may be applied is definitely stated. Sometimes this temperature is placed at 118° F. This is probably too low to bring about the greatest amount of good to the patient. Bottles containing water at this temperature cool too rapidly. On the other hand, it is far better to require frequent refilling of hot water bottles, than to run the danger of burning the patient. This rule is particularly useful in the treatment of ward patients where individual nursing cannot be given. It protects, chiefly, the unconscious, delirious or psychopathic patient.

Of course, hot water bottles should be tested for leakage, and should be encased in the proper cover. Too great care cannot be taken in the handling of an unconscious or delirious patient in regard to the application of hot water bottles of too high a temperature. It is to be remembered that the flesh of such patients is more easily injured than that of persons in health.

Patients who are allowed to draw their own bath water sometimes are burned as a result of the temperature of this water being too high. This is particularly true where no protective thermostatic valves have been installed, or where the patient is subnormal mentally, or abnormal in another way.

It has been found difficult to manufacture an electric blanket that is capable of producing sufficient heat to be of benefit to the patient, without the danger of its wires becoming short circuited if the blanket should become wet, or of unexpectedly producing an excessive heat sufficient to damage the patient. Except in certain instances where individual nursing attention can be given, such blankets may give rise to trouble.

When a Patient Is Restrained

While discussing the prevention of accidents to unconscious patients, further comment may be appropriate in regard to other forms of accident that are peculiar to this type of patient. It should be recognized that the patient in restraint is in a continual state of danger. Great attention should be given to the type of restraint employed and to its mode of application, and there should be frequent inspection of all such patients, not only to safeguard their comfort but also their safety. Strap restraint applied to ankles and wrists, unless applied to both wrists and both ankles, is of danger to the patient. Patients with ankle restraint only, have been injured by throwing themselves out of bed, and being thus suspended until they could be rescued by a nurse or other ward worker. Restraint, applied to the wrist of one side and the ankle of the other is dangerous. Sheet restraint may become displaced and thus interfere with breathing. Restraint which is not changed frequently enough, and which becomes too tight, may impede circulation and bring about damage to the patient.

To prevent the necessity of the application of restraint in cases of senility, beds of the type employed for the care of epileptics, are useful, that is, with sides from twelve to twenty-four inches high.

Accidents have happened to patients during such a usually harmless procedure as gastric lavage. This is particularly likely where the stomach of an unconscious patient is being washed. The sensitivity of the glottis being destroyed, the tip of the stomach tube has been known to pass into the trachea, and the patient has lost his life as a result of drowning.

There is no more distressing occurrence from the standpoint of both hospital and community, than for a patient to fall or jump from a hospital

window. This is one of the commoner major accidents occurring in the hospital. Often it is not preventable. Frequently this accident could be avoided if some member of the hospital personnel were alert to the danger. Reference is made to the fact that in the case of the suicidal patient, there is usually some indication of his intention sometime prior to the event. He may appear unusually depressed, or in the course of his conversation may drop some hint of the fact that he intends to destroy himself.

Some hospitals possess removable gratings, which can be placed on windows where such patients are being treated. These gratings can be locked on, and can be removed when the type of patient is changed. It is felt by some, however, that the presence of these gratings is depressing to the patient and that they should be avoided for this reason.

It may be said that unless the nurse is intelligent and is on the outlook for indications of suicidal intent, even gratings will not usually avail to avert the accident. The alcoholic, delirious patient may fall or jump from the window or fire escape, but it is because he is endeavoring to escape from his terrors, rather than because he is deliberately desiring to destroy his life. Such patients, of course, should be placed in rooms properly safeguarded by grated windows and locked doors.

Some hospitals even remove all furniture from the particular rooms set aside for this purpose, and prevent damage to patients by padding corners or other prominences against which they might fall. Where full length gratings have been placed on windows, the superintendent should remember that in case of fire, it might be necessary for firemen to gain entrance to the room from the outside, and that locks on these gratings should be accessible from both sides, whether the key is available or not.

Safeguarding the Suicidal Patient

To prevent such an accident there should be, first, a proper appreciation of the type of patient, and next, one or more safe rooms, in which the suicidal patient could be temporarily placed until he can be removed to more suitable quarters. When such a room is used, the greatest tact should be employed by the nurse and others coming in contact with the patient, to prevent him from knowing he is being watched. When such gratings are employed they should be of close mesh, so that a suicidal patient could not break the glass, and secure a section of the windowpane with which to do himself harm. A sixth sense, with which to detect the expressed or hinted intentions of sui-

cidal patients, is a valuable and desirable quality. A discussion of the subject—the danger of self-destruction by patients—should be extended to include accidents from hanging and drowning. Patients have been known, if left alone in a bathroom, to have caused their deaths by either of these means. Here again, the intuitive foresight of a careful nurse is lifesaving.

In regard to accidents as a result of falling from high places, open elevator shafts and open windows, particularly those with low sills, continually present this danger. It may be said in regard to elevators that patients and employees not trained in handling an elevator, should never be allowed to operate one. Door catches should continuously be inspected, to be sure that the door cannot be opened except from the inside. Automatic or push-button-operated elevators are usually safe in this respect, unless the door-locking apparatus becomes imperfect. Whenever elevator doors are purposely left open for cleaning or for any other reason, a guard must be placed near by to prevent absent-minded persons from walking into space.

Accidents from Electricity

In the modern hospital the electric installation is usually of such a nature that patients cannot readily come in contact with live wires. It is only when electric circuits are tampered with or when untrained persons endeavor to repair lines, that this danger arises. There is considerable danger always existent in and about x-ray and physical therapy rooms, where electricity is being used for diagnostic or therapeutic purposes.

The old-fashioned dental chair, in which an electric connection has to be brought in close proximity to the patient in taking a dental film, has given rise to unfortunate accidents. The dental chair, of course, should be insulated by placing it on cork, linoleum or wooden flooring. The modern dental x-ray equipment has been rendered more safe than the type formerly in use. In the x-ray room, the chief danger to the patient appears to be from overexposure with resulting x-ray burns. The modern x-ray therapeutic plant includes the presence of safety devices, such as a galvanometer, which registers the absence of the x-ray filter. The attention of the operator is thus called to this fact by the deviation of the galvanometer needle. Burning of the patient is a matter that can be prevented by the careful x-ray operator. Overexposure gives rise nowadays to fewer and fewer injuries to the patient.

In the treatment of ringworm of the scalp, too long exposure will not only result in the removal of the hair, but also will destroy the follicle, with a resulting permanent baldness.

Editorials

Happiness

WILLIAM LYON PHELPS has written a most delightful little essay called "Happiness," in which he expounds the theory that he that has the most interesting thoughts is happiest, and there can be none who will deny the logic of this simple statement.

The selfish person is never happy because his mind is occupied with a most ordinary and uninteresting thought—a selfish person—and because he is continually violating that oldest of truths, "It is more blessed to give than to receive." The joy of giving transcends all other joys whether the gift be wisdom, service, sympathy or material things.

Who better typifies the happy man than the truly efficient hospital administrator? Whose life is more fraught with interesting experience and who has greater opportunity to give unselfishly? The cold, austere and unsmiling superintendent or department head is a greater menace in a hospital than anywhere else because every patient craves some sympathy and some little bit of cheerfulness, so that he may forget his own troubles. To be met by sour-visaged efficiency must actually retard recovery.

Happiness is the one contagion that should be encouraged in the hospital.

Old Age Pensions

AGE is a chronic disease to which all are heir. Dependence on the efforts of others, while not so inevitable, so certain, befalls many during the later years of their lives.

Nor is this state always the fault of the individual. Accident, illness, dishonesty on the part of others and many other factors may be causative; while intemperance, lack of caution, incompetence and shiftlessness are personal vices that may prevent financial independence in old age. These are some of the hazards of living.

Moreover there does not seem always to exist a definite relationship between low or medium earning power, and old age dependency. Even a meager income with the added resource of habits of thrift may create a comfortable estate, while the man whose efforts bring a greater financial return may know want before the age of three-score years and ten.

For sixteen years at least the obligation of the

hospital to its aged employees has been discussed by the hospital field. The board of trustees of the American Hospital Association from time to time revives this now hoary subject, only just as surely to allow it to slumber again, without making any successful recommendations or suggestions as to its solution.

Two main points present themselves for consideration:

Does such an obligation exist, and, if so, how can the hospital—which has always rightfully prided itself on the possession of a community conscience—discharge this debt with the greatest fairness to all?

As to the moral obligation that exists, opinions are not widely diversified. No institution can or does pay large salaries to all of its personnel. Those who receive the least monetary recompense are often loyal and conscientious, in an inverse ratio.

It is more than probable that the hospital's efficiency would be increased by providing old age protection for certain of its employees. Confidence in looking toward the future often adds to efficiency by obviating worry and dissatisfaction over present financial conditions, on the part of the individual. There is no question as to the absence of any legal obligation on the part of the hospital. Nevertheless, to pension aged employees must be thought to be founded on good business and humanitarian principles, by the many transportation, manufacturing and governmental bodies, which have for not a few years unequivocally accepted and practiced this principle.

Two plans have been adopted, to render more placid and comfortable the lives of aged, faithful employees: old age pensions and old age insurance.

In the first, the recipient does not usually contribute during his active years to a retirement fund, but is paid a definite sum monthly, which is taken from a public or corporate treasury. This has been called a noncontributory plan, although in reality health and strength and loyalty may have been freely given for many years.

In the second, the employee pays a certain amount and his employer supplements the sum in sufficient degree to provide for a monthly income upon the completion of a certain number of service years.

The system of providing for an annual payment or annuity, contemplates that the individual has periodically paid into a fund a stipulated amount over a period of years, which after a definite age has been reached will guarantee a certain income during his nonproductive years. This scheme is not applicable to the present discussion.

Whether it is legal for the hospital to employ the income or principal of trust funds for pension purposes has been questioned. While a number of states have adopted a pension plan for their hospital employees, private institutions, fearing the legal and economic aspects of the problem, have been reluctant to adopt this scheme. The New York Hospital, New York, since 1914, has encountered no such difficulties. It is entirely possible that bequests might be secured for this specific purpose, were hospitals more frank in their acceptance of this obligation. This much is certain: if hospital service were made more attractive, competition with business houses in securing high-grade help would be more successful, and the patient would benefit thereby.

THE MODERN HOSPITAL believes that hospitals have been too cautious, unduly conservative, in this matter; that the number of pensioners would not be relatively great, and that the economic burden on the individual institution would not be too burdensome.

The hospital field awaits aid in deciding this problem.

Problems of 1928

IT IS all very well, as one of our readers points out, to present problems of hospital administration at the beginning of the year but what about solving them? It is true that many of the problems that were listed in the January, 1927, issue of THE MODERN HOSPITAL are still unsolved, yet it is gratifying to note that definite progress has been made toward their solution and that at least the majority of hospitals are fully aware that improvements are being made. Some of the things mentioned among this year's problems are insolvable, but more important than mere solution is the awakening of conscience to the existence of the problem.

One interesting result of the letters received this year is that finance and the education of the public toward costs and charges have been frequently mentioned by hospital executives geographically far removed from each other, and there can be no doubt that had every superintendent in the land contributed to this symposium he would have directly or indirectly mentioned these two important points of administration.

Finance—like the poor—we have always with us and it probably always will be the source of much suffering among hospitals until the trouble is alleviated by some miraculous treatment yet to be discovered. Its basic property will undoubtedly be common sense thoroughly mixed with business principles.

The education of the public is a much easier problem to solve, yet its very simplicity seems to have retarded its solution. The education of the public demands nothing more or less than the recital of truths about your institution. If the superintendent who so conscientiously manages every other department of the institution would devote an hour or two a week to giving the public facts about his hospital, and if he would insist that every patient is more than satisfied with the hospital's treatment, he would be making loyal and understanding friends by the hundreds, ready and willing to defend the hospital against all detractors with the same zeal that sends us to the defense of our religious beliefs when they are attacked.

Stance

THE Sanskrit had the verb *stha*, the Latin, *stare* and the Anglo-Saxon, *standan*, all of which means to stand. We moderns, particularly golf addicts, use a verb for the art of standing, stance. Stance is the attitude assumed in addressing the ball whether it be on tee, fairway, rough or green. It is the way we put our feet on the ground—the bodily pose we take. More than this, the word includes the mental attitude that we bring to the game—overconfidence, the sense of inferiority, fear, courage, foolhardiness, overcaution, these and a thousand other mental stances are unconsciously assumed by all of us the moment we pick up a golf club.

In this we reflect our individual temperaments, our physical and nervous condition and, in fact, our very characters. A skillful golf analyst can even tell by a golfer's stance what he is thinking. When he is irreverently but silently saying to the ball, "Go in the cup, you concentrated contrariness," it shows in his stance: when an Irishman is in a trap, his attitude is crying aloud, "Sure, I could put the ball over this bunker, if there was no bunker there, at all, at all." The silent profanity of the cleric is no less apparent than the slices of the surgeon, the pulls of the politician and the hooks of the fisherman. In golf success or failure is a matter of personal responsibility, which is another way of saying self-control, and the golfer who can restrain his fear, his confidence, his anger and his nervousness, in other words, his mental stance, is the one who wins.

In life, we also reflect ourselves by our stance. If we can keep our feet squarely on the ground, focus our minds on the job and maintain our self-control, we shall succeed; if we do not or cannot, we shall fail. One sometimes wonders why certain brilliant, well educated persons never seem to

get anywhere, why they shift from job to job, why they never seem to profit from splendid opportunities. If we study them carefully, we shall find that the fault lies in their mental stance, something in the way they stand towards the affairs of life, affecting disastrously their careers. Always, it is a question of self-control. If we can control our tempers, tongues, minds and bodies, we can do anything we please; lacking this power, we cannot. Life is all in the stance.

Talking It Over

JANUS, the two-faced god, looking at the past and toward the future, his month is that of endings and beginnings, of regrets and hopes. As the originator of all things, the Romans asked his blessing on rising, at meals, at all beginnings, at puberty, at marriage and at the inception of every official and private enterprise. Numa, the Roman calendar maker, named the first month after him and the first day of the new year was set aside for stocktaking of thought, word and deed and planning for the future. The excellence of this custom is witnessed by its continued observance. Standing thus at the beginning of the 366 days which 1928 is bringing us, TALKING IT OVER makes its best bow and extends to the hospital field good wishes for a year of happiness and accomplishment. May the scope of your beneficent influence ever broaden and as you journey upward may you be cheered and heartened by the satisfaction of useful work well done.

* * *

AS WE look back over the twelve months of 1927, we see much that is pleasing and much that is not, the one inspiring hope and the other stimulating renewed effort. The year has seen a broadening of the national outlook with regard to hospitals and this has not come wholly from the hospital field itself. The layman is beginning to realize that the hospital is a community necessity and that its functions are far broader than mere remediation.

* * *

EUBIOTICS, a relatively new word meaning the science of healthy living, is just coming into its own and is a conception of physiological existence. If you can't be eubiotic, be as eubiotic as you can.

* * *

ONE great handicap in administration is the failure to give orders accurately and to make sure that they are understood. Many times an executive thinks he has given an order when all he has done has been to mention a matter casually—so casually in fact that the subordinate never realizes that it is an order. To secure accurate obedience, orders must be accurate and impressed as orders.

* * *

LEAP year is here again, the year called "leap" because any fixed date after February leaps over a day of the week and falls on the next week day but one to that on which it fell the year before. Supposed to be the

year when the privilege of proposal changes gender, it is regarded as hazardous by timid bachelors. Canny Benedicks who have cut their matrimonial eye-teeth, know that the open season for males runs continuously.

* * *

THERE are a lot of people who seem to think that the universe owes them a living, but they have not the energy to get out and collect it. It is a fact that if people try to make the world carry them they are apt to get dropped with a terrific jolt. Such people never realize that laziness, selfishness, moral cowardice and failure travel in company. These are the people who start work like a glacier and quit it like a raging torrent. They try to depend upon luck and pull rather than upon brains and push, and sooner or later a good many of these wind up in the hospital. If our institutions could indoctrinate this class with the ideals of work, how much better off the body politic would be.

* * *

ORDINARILY, we think of industrial medicine as something that is to be applied to factories, workshops, mines and the like, forgetting that it has a definite place in the hospital's scheme of operation. Here is an opportunity for doing an excellent piece of work, beginning with the physical examination of applicants for employment, their vaccination, placement and medical supervision, and continuing through studies of absenteeism and the treatment of illnesses and accidents.

* * *

OVER in England, they are having a lot of worry over tips in nursing homes. Be it explained, that custom demands that upon leaving the home (really a private hospital), the patient shall give presents (Sic) to the nurses and tips to the servants. At times, this constitutes a really heavy burden, as in one instance (quoted in the *Lancet*) the amount aggregated thirteen pounds sterling. An endeavor is being made to abolish the custom of giving presents to nurses. Perhaps the first step in this direction would be the insistence upon adequate salaries for nurses.

* * *

THIS is a good time to go over the hospital mailing list, eliminating those names that do not represent potentialities to the institution. Names of those who are deceased and those who have moved away should be dropped; all other names should be evaluated and addresses brought up-to-date. This will be the means of saving much money and making the list more accurate.

* * *

THERE seems to be a terrific welter of conversation about the high cost of sickness, and hospitals are coming in for more than their share of the diatribes. There is no blinking the fact that sickness is expensive but this is no argument on which to compare hospital costs with hotel costs; in fact when the extent and quality of highly specialized service is considered, a hospital is no more expensive than a hotel. The patient who would not dream of putting up at a "Ritzie" hostelry, elects to occupy a private room at a hospital and to require the services of special nurses. If he went to a high-class hotel, had his meals in his room, his bath in his bed and special attendants to look after him, his daily expense would be practically the same as at a hospital. It isn't the hospital that is extravagant; it's the tastes of its patients.

The Modern Hospital Reading Course: Lesson XII

Nursing in the Hospital

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THE nursing situation is beset with many knotty problems that require solution, but the present discussion centers around the hospital, first, because the hospital is the largest single employer of nurses, and, second, because the hospital is practically the sole educator of the nurse.

This paper, then, deals exclusively with the nursing situation in relation to the hospital, and by reason of space the presentation of it is but sketchy.

The first and foremost consideration is the adequacy of nursing care from a quantitative point of view. Nothing is more fundamental for a hospital than to find out for itself how much nursing care is required for its patients. There are many guesses and estimates but little of a definitely ascertainable character. In the outline of the "Course of Study and Syllabus for the Guidance of Nurse Training Schools," published by the University of the State of New York, the suggestion is made that the ratio of nurses to ward patients should be not less than one nurse to six patients on day duty and at least one nurse to every twenty patients on night duty.

Ratio of Nurses to Patients

A prominent nurse educator stated that adequate nursing in a hospital implies one nurse for every patient. In the light of present day practices this estimate sounds ludicrously extravagant, but it is probably not as extravagant as it may seem, for considering the three shifts in a twenty-four hour day, it means one nurse for every three patients. Furthermore, it should be remembered that in many hospitals nursing is done by pupils who need time for their theoretical instruction and reading, that every nurse has a vacation and that a certain amount of time must be allowed for sickness.

Pragmatic standards are undoubtedly valuable but they should be tested by accurate analysis of work and of the time a nurse is required to give in connection with the care of an average patient. Such an analysis was made several years ago in New York in a study conducted under the auspices of the public health relations committee of the New York Academy of Medicine. Ten hospitals

agreed to select what might be considered an average patient in the medical, surgical and pediatric services. By "average" was meant a patient who was not so sick as to require continuous watching and care or one who was already convalescing. Thirty-three patients were selected, and on a particular day the nurses were requested to give to these patients all the care and time that the patients required and to record the time spent for every function.

Time Required for Nursing Care

There were some variations in the amount of time taken to perform the same services in the several hospitals. The variations were probably due to differences in facilities in the wards of the ten hospitals studied, the degree of preparation of trays, the distances to and from the utility rooms, and other elements that enter into the situation, besides that of personal skill. The total nursing time consumed in the care of the thirty-three selected cases was 167 hours and 48 minutes, or an average of 5 hours and 5 minutes per patient. In the case of children, the time required for necessary nursing was greater than that for adults, being 5 hours and 39 minutes during the twenty-four hours. The least amount of nursing care was required by the surgical patients, the average being 4 hours and 39 minutes per patient in twenty-four hours. The average for a medical case was 4 hours and 57 minutes.*

By applying these gauges, it was possible to bring out the fact that few hospitals in New York City come up to this optimum standard. Only twenty-two of the fifty-three hospitals studied had an average of more than three hours of bedside nursing per patient in the twenty-four hour day.

By what grades of nurses the work required should be done is the next consideration of importance to the hospital. This is a matter of vital concern both from the point of view of the interest of the patient as well as that of the pupil nurse. It is likewise of some financial interest to the administrator of the hospital.

Referring again to the experience of New York hospitals as ascertained in the aforementioned

* "The Hospital Situation in Greater New York," by E. H. Lewinski-Corwin, page 217. G. P. Putnam & Son, New York.

study, the differences in the ratios of graduate to pupil nurses are evidently exceedingly large. One factor in this situation is undoubtedly the relative attractiveness of the hospitals as educational centers, but therein does not lie the entire explanation, for it is not in the best institutions that the highest ratio of pupil to graduate nurses is to be found. In the highest ranking institutions the pupil nurses constitute not more than 65 per cent of the entire nursing staff, not counting special nurses. Taking the fifty-three New York City hospitals with training schools as a unit, the nursing staff, outside of special nurses, consisted of 36 per cent graduate nurses, 57 per cent pupil nurses, and 7 per cent semi-trained attendants of one kind or another.

The proportion of the nursing staff assigned to teaching and supervisory duties varies materially. In a large number of the important training schools about 15 per cent is assigned to teaching and supervision. The proportion of nurses on day duty is pretty much the same in the more important hospitals, the variations being from 51 per cent in one of the well known hospitals to 58 per cent of the entire nursing staff in another institution of more or less similar rank.

The proportion of nurses assigned to night duty ranges from 14 to 19 per cent of the entire force. It has been estimated by competent observers that on night duty the ratio of pupil nurses to patients should not exceed one to ten. This is, however, rarely observed.

There can be no discussion of the nursing situation in the hospital without consideration of the extent of nurse training. The recent survey by the Council on Medical Education and Hospitals of the American Medical Association, published in the March 12, 1927, issue of the *Journal of the American Medical Association*, affords a valuable insight into the situation and should be studied in this connection.

Training School Standards

With the growth of the hospital field, the training opportunities have increased, and while in 1900 there were 432 hospital training schools for nurses with a registration of 11,164 pupils, in 1926 there were 1,114 accredited training schools with a student body of 76,527.

The graduate personnel of the hospitals of the United States, taken as a unit, constitutes 16 per cent of the entire nursing force. This, of course, varies from state to state and from hospital to hospital. In many institutions there is a lack of adequate supervision, particularly for night service. Miss Goldmark's study on "Nursing and

Nursing Education in the United States" * emphasizes this deficiency of supervision of night duty work in the following words:

"The lack of adequate supervision is one of the most deplorable features of night duty work. It means not only that the student has no actual instruction during this long period of her training but that she is often charged with responsibility beyond her due. Especially on her first assignment to night duty, when the strain of unwonted responsibility is greatest, adequate supervision is bitterly needed. In small hospitals students are left totally alone at night in charge of wards, with only the superintendent to awaken at need. Of twenty-one hospitals visited by us and reporting on this point, twelve provide only a single night supervisor to oversee all student nurses. As her supervision duties embrace the entire hospital building, she may easily be out of reach at the very crises when she is most needed, and which students in consequence must face as they best may alone. Six hospitals make somewhat better arrangements by providing one assistant to the general night supervisor. The best system in practice among the hospitals observed, that of assigning a student as junior nurse during her first night assignment, to assist a senior, was found at only four hospitals."

State Requirements Differ

Except for Nevada, there are training schools for nurses in the hospitals of every state, the hospitals of New York, Pennsylvania, Illinois and Massachusetts contributing the largest quotas of trained nurses.

The state requirements for admission to the training schools differ considerably; six states have no specified requirements, five states require the full high school course, while fourteen require two years of high school work, and twenty-three states require only one year. Many of the hospitals in these states with low entrance requirements increase the requirements as to preliminary education and yet find no difficulty in attracting a full quota of their student body.

Nowhere is the length of training less than two years. This minimum applies to seventeen states; in one state it is twenty-six months; in three, twenty-eight months; in two, thirty; and in twenty-five, three years.

As the present trend of best informed opinion concerning the basic nurse training is in favor of a two-years' course, it is a matter of practical concern that twenty-five states have a legal requirement of a three years' training. From the point of view of adequacy of educational opportunities, it is of interest that 59 per cent of the

*The Macmillan Company, New York, 1923.

nurse student body is trained in hospitals that have a capacity of 100 to 499 beds; 21 per cent in hospitals having from forty to ninety-nine beds; and only 4 per cent in hospitals that have less than forty beds. The large hospitals with over 500 beds train only 9 per cent of our student body. It will, therefore, be seen that nurse training is confined almost wholly to the institutions of from forty to 500 beds, and two-thirds of the entire field is in the hospitals of from 100 to 500 beds. It would, however, be unfortunate if any attempt at grading schools should result in the abandonment of nurse training in the smaller institutions which at the present time supply 21 per cent of the student corps. The question of the training standards in the small hospitals requires study. New York State requires a minimum of twenty-five beds for training purposes.

An interesting discussion of "The Very Small School of Nursing" was presented recently by Mary E. Gladwin, director, nursing education, Minnesota State Board of Nursing, St. Paul, Minn., at the thirty-third annual convention of the National League of Nursing Education, 1927, which can be found in the proceedings of the above-mentioned league.

The bulk of the nurse student body is found in the general hospitals. Fully 95 per cent of the young women in training are in the general hospitals; of the remaining 5 per cent, over one-half are in the hospitals for mental and nervous diseases, and the remainder in special hospitals, including tuberculosis sanatoriums. The report referred to above on "Nurse Training Schools in the United States" records thirty-eight training schools that are found in hospitals considered by the Council of the American Medical Association as unethical; eighteen of these schools are ac-

credited by their respective states. The total enrollment of these schools for the year 1926 was 426 students.

There are twenty-five colleges and universities conducting nurse training schools which grant degrees of A. B. or B. S. in nursing. The enrollment last year of these twenty-five schools was 368 students. Four other universities have announced their intention to establish nurse training schools. Two years ago Howard University began a five-year course for colored nurses, but the experiment proved unsuccessful as only one pupil enrolled for it.

Hours on Duty

With the exception of the State of California where the law provides for a forty-eight hour nursing week, there is no legal time limitation. The movement for the adoption of an eight-hour day is making rather slow progress because of the many administrative and other difficulties involved. According to the last list of "Schools of Nursing Accredited by the State Boards of Nurse Examiners," published by the American Nurses' Association, the weekly hours vary from forty-seven to eighty-four hours, the predominating norm being between fifty-four and sixty-three. Although in some institutions the total number of hours per week is forty-eight, the exigencies of nursing work do not permit the division of the day into three shifts of equal duration. The night shift is usually longer than eight hours, although the study made by Miss Goldmark indicates that of the twenty-two hospitals studied, six adopted the eight-hour shift for night duty.

With the recognition of the duties and responsibilities of the superintendent of nurses as well as of her assistants, the rates of compensation

Review Work

1. Prepare a graphic chart showing organization of a nurses' training school for a hospital of 200 beds, indicating also the relation of the school to the executive head of the hospital and the training school advisory committee.

2. Make a twenty-four-hour nursing schedule for an acute male surgical ward of twenty-eight beds, indicating numbers of graduates, students, orderlies and helpers, with their hours of duty.

3. Make a year's budget for a training school of ninety students, indicating cost of salaries, supplies, new equipment and re-

placement of equipment for such a school.

4. Devise a curriculum for a training school of sixty students who, with fifteen graduates, three orderlies and six helpers, must do all that is required in a general hospital of sixty private rooms and sixty ward beds. The curriculum should attempt both to do justice to the patients and to observe the training school requirements of your state.

5. Outline a campaign for securing student nurses for some hospital known to you, indicating what various publicity methods would be likely to bring results.

have increased. In a group of New York hospitals the average salary of a superintendent of nurses is between \$200 and \$225, plus maintenance; in quite a few instances the salary is \$250, plus maintenance, and only in one hospital on record is it as low as \$150 per month. The range of salaries of the first assistant is between \$100 and \$200, plus maintenance; for the second assistant it is between \$100 and \$160. The operating room supervisors receive from \$90 to \$185, plus maintenance. The salaries of the night supervisors range from \$100 to \$188, and those of the dispensary supervisors from \$80 to \$200. In the latter case the supervisor was provided with meals only.

Training school instructors' average \$125 a month, plus maintenance; head nurses receive \$95. In the case of pupil nurses there is no uniformity of practice. In some instances the pupil nurses get a small monthly allowance; in rare cases it is as high as \$25 a month. There is a difference of opinion as to the wisdom of the policy of granting monetary allowances to pupil nurses. Some nurse educators feel that a monetary allowance commercializes the field of nurse training; others believe that it is an inducement to desirable candidates who are in straitened financial circumstances.

A few hospitals offer a bonus at the end of the training course in lieu of a monthly allowance. There is also a difference of practice with reference to the supplying of books, uniforms, shoes and the like.

In view of the many opportunities now open to young women in the business world, training schools have to offer special inducements to attract desirable young women. There are women who go to the training schools because of an impulse for service and who would not consider opportunities in other fields. The larger group, however, is motivated to a varying extent by other considerations than a natural penchant for nursing.

Adaptation of Curriculum to Needs

Although reorganization might be desirable from the point of view of training of nurses, it is entirely academic and futile to think that the training schools could be reorganized at the present time and put on the same basis as that of other professional schools where pupils pay tuition fees. The practical problem before the training schools is the adjustment of the curriculum and of the environment to existing conditions and requirements. Certain prevailing methods are archaic and out of harmony with modern demands; in many instances the discipline is al-

together too rigorous. Joint schools for the teaching of elements of science have proved practicable in certain communities, and such may be the case with extern pupils who would reside at their homes but obtain instruction and do the work at the hospital. The acceptance of a certain proportion of extern students may tap new resources for the student corps.

Specialized Training

Considering the importance that public health and industrial nursing have assumed, it is desirable for the training schools to take cognizance of this in the curriculum. It is with this in view that opportunities should be provided to the pupil nurses in the care of patients with communicable diseases, as well as experience in the out-patient department. The average training school cannot be expected, however, to offer opportunities for highly specialized postgraduate study. This work should be reserved for the schools associated with universities or with some special hospital of recognized standing.

It is of utmost importance for a nurse training school to have a properly selected governing board to guide its destiny. The medical profession should have adequate representation on such a board, which should also include trustees of the hospital as well as representatives of the public health, educational and civic interests of the community. The superintendent of the hospital should be an ex-officio member of the training school board.

The nationwide study of training schools that is being conducted at present will undoubtedly result in the formulation of reasonable standards for the guidance of hospital authorities.

Can We Get Permission for Autopsies?

"There is a strange idea prevailing among the medical profession that adverse public opinion is responsible for the low rate of autopsies in this country," says Dr. Frederick C. Smith, Marion, Ohio, in the *Journal of the American Medical Association*. "The larger medical centers have shown time and again that a high percentage of permissions for autopsies can be secured. At the Mayo Clinic, Rochester, Minn., autopsies were done in 86 per cent of the deaths in 1925; at Johns Hopkins Hospital, Baltimore, Md., in 84 per cent of the deaths in 1924; at St. Agnes Hospital, Baltimore, in 80 per cent of the deaths in 1925. Fifteen other hospitals obtained permission for from 25 to 69 per cent of the deaths in 1924 and 1925.

"That which is possible in Rochester and Baltimore in securing permission to examine the dead can be done wherever there is the same interest in getting at the basic facts in medicine—wherever there are men who want to know."

YOUR EVERYDAY PROBLEMS

A department devoted to the informal discussion of problems arising in the everyday life of the hospital superintendent.

[No attempt has been made to offer final conclusions relative to the questions considered in this department. THE MODERN HOSPITAL will gladly welcome further comment by its readers on any of these problems, or the presentation of other queries for discussion in later issues.—Editor.]

Has the Small Rural Hospital an Obligation to Buy from Local Dealers?

The board of trustees receives monies from benevolent persons in the community to maintain the local hospital in as efficient and economical a fashion as possible. This money is a trust which the board members, by virtue of their office, are bound to conserve. Here and there some business men have come to feel that since they contribute to the hospital, its board should purchase supplies from local houses irrespective of whether competitive bidding or buying without the community will bring about a saving of money.

Such an attitude is extremely shortsighted. The superintendent of a hospital is in duty bound to buy as cheaply and as efficiently as possible. He owes no obligation to local business men unless they can compete in open market with others supplying like goods. If in order to secure and maintain the friendship of local business men, he buys at a loss to the hospital, he is not performing his whole duty to his community. If through the deduction of freight rates or loss in shipping or any other inevitable expense to the hospital, local buying can successfully compete with purchasing from a distance, then of course there is no argument against the hospital patronizing local merchants.

Community pride and a broad outlook on the function and work of the hospital will prevent local business men from becoming offended should the community hospital not purchase its staple articles from them.

Should Written Consent for Minor Surgical Procedures Be Required?

The personnel of some institutions have about come to the conclusion that the superintendent has nothing else to do but to enact troublesome and time-consuming rules. It is certainly possible for rule making to be reduced to an absurdity. On the other hand, to secure written consent for every operation is to err on the safe side. And yet certain minor procedures, such as venesection, chest and abdominal tapping, incision and drainage of abscesses and spinal punctures, may for many years be carried out without written consent, and no difficulty may arise as a result of this omission.

In some institutions unless a general anesthetic is to be administered consent for operation is not required. However, such a rule is somewhat too far-reaching, because of

the increasing use of spinal and local anesthesia in the performance of what may be termed major surgery. To detail a list of procedures in which it is not necessary to secure written permission, would require considerable space in the institutional rule book. To require patients to sign permission for all minor procedures is also likely to arouse unfounded fears in their minds as to the seriousness of the operation which they are about to undergo. Here the common sense of the administrator must dictate the safe and wise course to pursue. It would be better to require permission on all procedures whether major or minor in character, than to allow the institution or its staff to suffer the embarrassment of public criticism or even of defending legal proceedings.

THE MODERN HOSPITAL advises that it is probably relatively safe not to require a written permission for the performance of the type of procedures listed above, but that in such cases, the resident physician should note on the chart that the patient's verbal consent has been secured, and that he has something of an idea as to the step which is about to be taken. If the nurse or physician senses, in consideration of the character or characteristics of an individual patient, that trouble may arise as a result of some hospital step, then this patient or his relatives should be required to sign a written permission therefor.

Should a Seventy-Five Bed Hospital Have an Out-Patient Department?

The hospital from which this question emanates, is in a rural community. Its seventy-five beds are 90 per cent occupied during most of the year. It possesses no out-patient department.

It has been said that no matter how finely equipped and constructed a hospital may be if the interest in and the supervision of the patient do not continue to exist after he leaves the hospital, that hospital is unable to render the service to the community that it should. The out-patient department is the outpost of the hospital. It is its connecting link between the active work of the in-hospital bed and the home life of the patient.

In the institution mentioned above the out-patient department need not be subdivided as would be the case were the institution larger and were it an urban community. Nevertheless there certainly should be made some provision for the return of patients for re-examination and advice once intensive hospital supervision is no longer necessary. Indeed, such an out-patient department might be conducted in conjunction with the institution's admission ward, and even might not have set hours such as is the case in larger institutions. Medical, surgical and obstetrical patients particularly, should be encouraged to return to the hospital at set intervals, and this cannot be done unless some physical provision is made therefor. Not only is the presence of a dispensary

imperative, from the patient's standpoint, but in the course of a year, it will save the hospital money. The tendency of members of the visiting staff to retain the patient in the hospital until he is able to return to work, or until some specific form of treatment has been carried out, will be lessened once he knows that his patient will not be lost sight of because of the existence of an institutional out-patient department.

It may be said, therefore, that the out-patient department may be one which is highly developed, or one which exists in combination with some other hospital function. Of whatever type, its existence is of prime importance.

Should All Hospitals Have an Organized Staff?

The institution in which this question arose is a hospital of fifty beds. It is a new institution. The members of its staff had been in the habit of performing all types of work, including major surgery, before the community secured its new hospital. When it became necessary to undertake a staff organization, none of the physicians was willing to devote himself exclusively to the specialties, and all felt that they were equally qualified to perform the surgery of the institution. The surgeon became so denominated according to his seniority of service.

The board of trustees desired a specialized staff. It would seem that, in fairness to the sick of this community, surgery when needed should be performed by a physician especially trained to do this type of work. The same may be said of the other specialties.

It appears fair for the board of trustees to require that the members of its staff denominated as surgeons, undertake special courses to equip themselves for carrying out the surgical treatment of patients requiring the same. It appears wise to abandon the practice of appointing by seniority, and to adopt a scheme of selection as a result of the possession of specialized professional ability. No hospital, whether it be of fifty or 500 beds, should possess an unclassified staff. It is along the lines of efficiency in hospital practice for certain physicians to perform surgical operations, others to be particularly skilled in internal medicine, while others are devoting special attention to perfecting themselves in the remaining basic specialties.

In this instance it seems that the board of trustees should immediately take steps to bring about a proper classification of its staff and that it should, even at the expense of temporarily importing from adjacent towns or cities skilled surgeons, build up in a conservative fashion, the practice of the common specialties in its hospital.

Is Artificially Produced Malaria a Danger to Others?

This is an interesting query which has been received from an institution in which paresis is being treated by inoculation with malarial organisms. The thought arose in the mind of its medical supervisor that if the transmission of malaria requires the presence of this disease in active form, and of the mosquito which acts as a host for these organisms, perhaps other patients in his hospital might be thus endangered.

Not only must malaria be present, but also a particular type of mosquito must be at hand, the ordinary *Culex* mosquito not being able to transmit this disease. There are several varieties of the *Anopheles* group which may and do act as hosts for malarial organisms. But fortunately the common mosquito in northern climes at least is of the *Culex* group. The existence of malaria whether

artificially or naturally produced in a locality where the *Anopheles* mosquito abounds, would of course endanger other patients, and such precautions as screening, spraying and drainage of ground water should be taken to destroy these insects.

It is interesting to note that with the exception of one type of the *Anopheles* group, these insects can be rather easily detected by the attitude which they assume when alighting on walls, tables or other room objects. The body of the *Culex* mosquito lies parallel with the surface upon which it rests, while that of the *Anopheles* mosquito assumes more the position of "standing on its head."

Since this query comes from the superintendent of a northern institution, it is likely that the *Anopheles* mosquito is not to be found in that locality, and that the patients undergoing treatment for paresis are harmless insofar as the transmission of malaria to others is concerned. It might be wise for the city or state entomologist to be consulted as to the certain absence of the type of insect capable of transmitting this disease.

Should the General Hospital Admit Communicable Diseases?

This question was asked by the superintendent of a hospital in a town approximating 50,000 in population. It may be said that it is the duty of the hospital so to carry on its work that it will render the greatest good to the greatest number of persons in its community.

The hospital in question was unprepared from the standpoint of possessing especially arranged isolation rooms, toilets and diet kitchens safely to isolate communicable diseases. Nevertheless a demand was made by certain members of the community that patients suffering with scarlet fever and diphtheria should be received within its doors.

In consideration of the above expressed general rule of hospital practice, it would seem that this institution should not admit contagious diseases. On the other hand, it may be said that the scope of hospital work has so widened within the past decade that the community expects the institution to be prepared to admit diseases of all types. It may be necessary, at times, for temporary care to be given to a psychopathic patient or to a contagious disease case, and when such an occasion arises a hospital should be prepared to meet it. It is therefore the duty of the hospital to be prepared to admit such patients as urgently need its help, providing no communicable disease hospital exists in the neighborhood.

A sixty-bed hospital which is being constructed in a community of 15,000 inhabitants has recently decided to provide for an isolation suite caring for four patients.

In new hospital construction it is a wise provision to construct such an emergency suite for contagious or other diseases requiring special isolation equipment.

THE MODERN HOSPITAL advises the hospital superintendent asking this question, to place squarely before her board of trustees the necessity for such a structural provision.

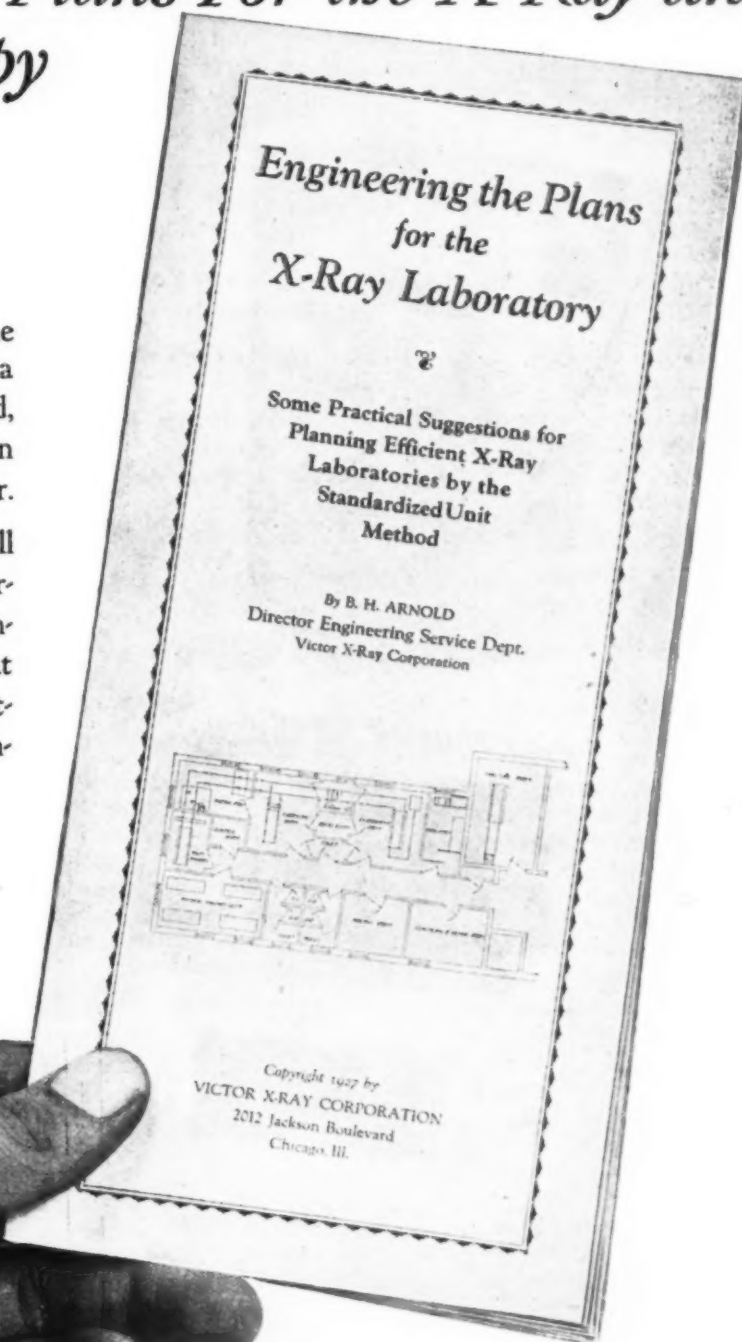
Should the Board of Trustees Pay the Expenses of Hospital Personnel to Conventions?

The attendance at meetings of the American Hospital Association is no doubt lessened because some boards of trustees fail to differentiate between a pleasure trip and a journey to the meetings of a hospital association. Such boards should appreciate that money spent in making possible the attendance, at national and state hospital

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association meetings, of their superintendents and even of their directresses of training schools, dietitians, occupational therapists and social workers, will return to them exorbitant rates of interest in money saved and morale elevated. The visit of a wide-awake superintendent to the city entertaining the American Hospital Association, ought to return in the course of a year, many times the outlay of money required for his traveling and hotel expenses. If such is not the case, something is wrong either with the superintendent or with the hospital association program.

To learn how better to purchase supplies and equipment, to acquaint oneself with simplified processes in cleaning, or the preparation of surgical supplies, is to save money for the hospital upon the return of its better informed administrator. Usually, boards of trustees need only to be informed concerning these facts to realize immediately their mistake in withholding traveling expenses from their hospital executive.

Nor should the superintendent be humiliated by being forced to urge upon his board that such be done. The extravagant board of trustees is the one which cannot "afford" to grant either the time or the money necessary for its superintendent to attend regularly the deliberations of national, state and even city hospital associations.

Can Vaginitis Be Safely Handled in the Children's Ward?

The treatment of vaginitis in the children's hospital presents a disturbing problem. The disease is actively infectious, and the ease with which it is transmitted places it in the category of conditions dreaded by all institutions caring for children.

Most children's hospitals have rigid rules in regard to the detection of vaginitis in incoming children. Cervical smears are routinely taken, and suspicious cases are isolated until proved non-infectious.

The difficulty in handling these patients is increased in hospitals that do not have isolation facilities. It can be said without reservation that it is an unwise step to endeavor to care for a case of vaginitis in a clean ward of a children's hospital, unless the most favorable conditions exist. In most hospitals where these cases are accepted (too few hospitals are willing to admit these children), an attempt is made to prevent the nurse caring for infected children from attending female children not so infected. Indeed, the intern handling these cases, is not permitted to treat non-infected children. If it is necessary, because of a complicating serious condition, to treat a child suffering with vaginitis in a ward with others, the most rigid aseptic technique must be adopted. This should include separation in an adjoining room, or by screens or curtains, or by partitions of wood and glass, hand scrubbing after treating these patients, and before handling uninfected children, gowning, careful handling of linen, dishes and playthings.

Theoretically, the vaginitis patient may be treated in wards with other children, without rigidly carrying out all of these precautions, but practically, in consideration of the seriousness and chronicity of vaginitis, it is not wise to attempt it. It is a good practice to repeat bacteriological examination of cervical smears at not longer intervals than three or four weeks. Nurses must be carefully instructed to be on the alert for the presence of vaginal discharges when bathing children, and should immediately report such findings to their supervisor.

In one institution where twenty-five or thirty patients

of this type are always under treatment, a separate floor is set aside for these children, with schoolroom, dining room, recreation and bathing facilities. There is no communication between this floor and other floors where non-infected children are being treated.

To isolate vaginitis as rigidly as one might a case of scarlatina, is to err, if at all, on the safe side.

Should Married Women Be Admitted to a School for Nurses?

The practice of admitting married women to hospital training schools varies much throughout the country. Indeed, in some instances there appears to be but little rationalization of a rule permitting married women to be admitted to the probationary class in the school for nurses, but requiring that nurses who marry after beginning their course, leave the school.

In other schools for nurses, married women are not admitted, particularly those with children, and nurses who undertake family responsibilities during their training are required to leave.

There is no question but that all things being equal, both interns and nurses who are married, are likely to render less efficient service to the hospital than are those who have not undertaken such responsibilities. To be sure, where unusual or unfortunate events have occurred in the life of a young woman who has been married, sometimes she may throw herself into the work of nursing the sick with much vigor, and more than average efficiency.

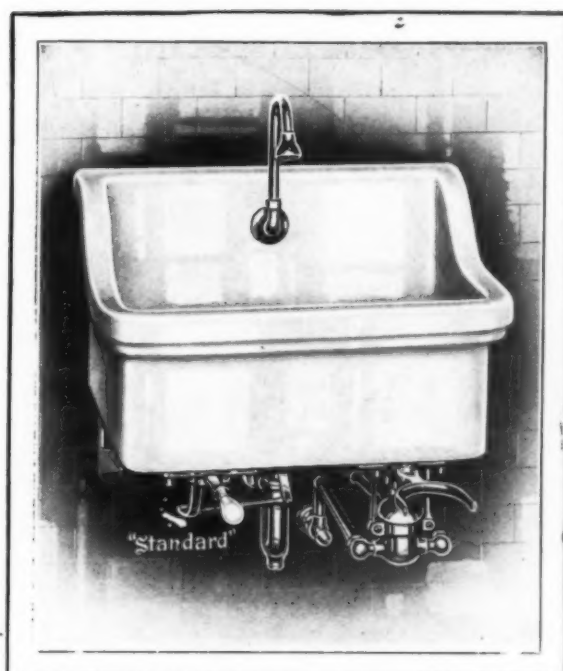
In the case of women who have been divorced or who are not maintaining a home, this rule may manifest noteworthy exceptions. It would appear in the long run since the obligations imposed by a training school upon its members are so exacting, that it would be better to admit young women who have no other responsibilities or outstanding interests than to learn the science and art of nursing.

Can the Hospital Safely Use Confiscated Alcohols Supplied it by Local or Federal Authorities?

It has become a practice for enforcement authorities, to offer the hospital confiscated alcoholic preparations for use in its scientific work. THE MODERN HOSPITAL has been asked its opinion as to the safety of employing such alcohol internally for therapeutic purposes.

It can be said at the outset, that no drug should be used, concerning which there is any doubt as to its purity. Average illegal alcoholic beverages seized by officers of the law, are of exceedingly uncertain content. Chemical analysis of this alcohol is the only way to be certain of its nature. Cheap alcoholic beverages are often prepared by an attempt at the redistillation of denatured alcohol. The common denaturants are wood alcohol, carbolic acid, formaldehyde and certain other preparations intended to prevent commercial grain alcohol from being used as a beverage. In the process of distillation which is as a rule hurriedly and hence imperfectly done, these toxic properties are often only partially removed. Such alcohol is capable of doing great harm to patients if it is used internally. Indeed, even its use for bathing or rubbing preparations is considered not wise.

It may be said that confiscated alcohol, unless a careful chemical analysis is made, should be used for no other purpose than for fuel for alcohol lamps, and perhaps in the laboratory or paint shop. To employ any alcoholic preparation therapeutically, demands certainty of its purity.



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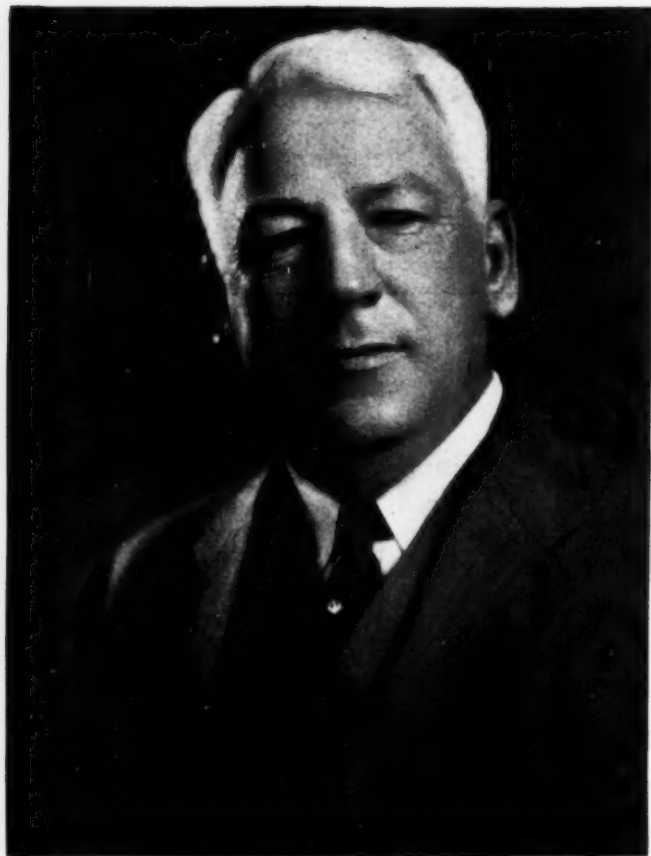
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NEWS OF THE MONTH

Dr. Caldwell Will Be A. H. A. Executive Secretary

Dr. Bert W. Caldwell, superintendent, Tampa Municipal Hospital, Tampa, Fla., formerly the Gordon Keller Memorial Hospital, has been appointed executive secretary of the American Hospital Association, to succeed Dr. W. H. Walsh. He assumes his new duties January 1.

Dr. Caldwell went to Tampa from the University of Iowa Hospital, Iowa City, Iowa, where he served as superintendent for two years. From 1910 to 1915 he was superintendent of the Hospital Santo Tomas, Ancon,



Dr. Bert W. Caldwell

Canal Zone, and during 1915 and 1916 he was hospital administrator of the Red Cross Rockefeller Typhus Commission to the Balkans. He was a member of the Rockefeller Yellow Fever Commission in Mexico from 1920 to 1922.

Dr. Caldwell has taken a prominent part in public health work, notably in his association with Dr. William Corbett Gorgas, surgeon-general of the United States Army, during the building of the Panama Canal. During the World War his services in the surgeon-general's department won recognition and he left Washington, D. C.,

to become superintendent of the University of Iowa Hospital. He was born in 1875 and graduated from Barnes Medical College, St. Louis, in 1898.

Institutional Management Course to Be Given in New York

A course in institutional management is to be given this Spring at New York University, New York, by Edgar C. Hayhow, B.C.S., department of management, New York University. The course will be held at the school of commerce, accounts and finance on Thursdays from four to six o'clock. Intending students may register between January 16 and February 3, and the first lecture will be given February 3. The fee is \$24 per semester.

The following are some of the subjects that will be included in the course: purchasing and stores; the purchasing of canned goods; the purchasing of meat; the dietary department; equipping the kitchen; the house-keeper; equipping the laundry; laundry organization and management; methods of washing; problems of coal, light, refrigeration; group inspection of outside institutions; repairs of buildings and grounds; fire drills; institutional conferences—procedure of staff conference and round table methods; general review of course.

During the semester an outside specialist will address the students, and an examination will be held at the conclusion of the course.

New Jersey to Have Hospital for Crippled Children

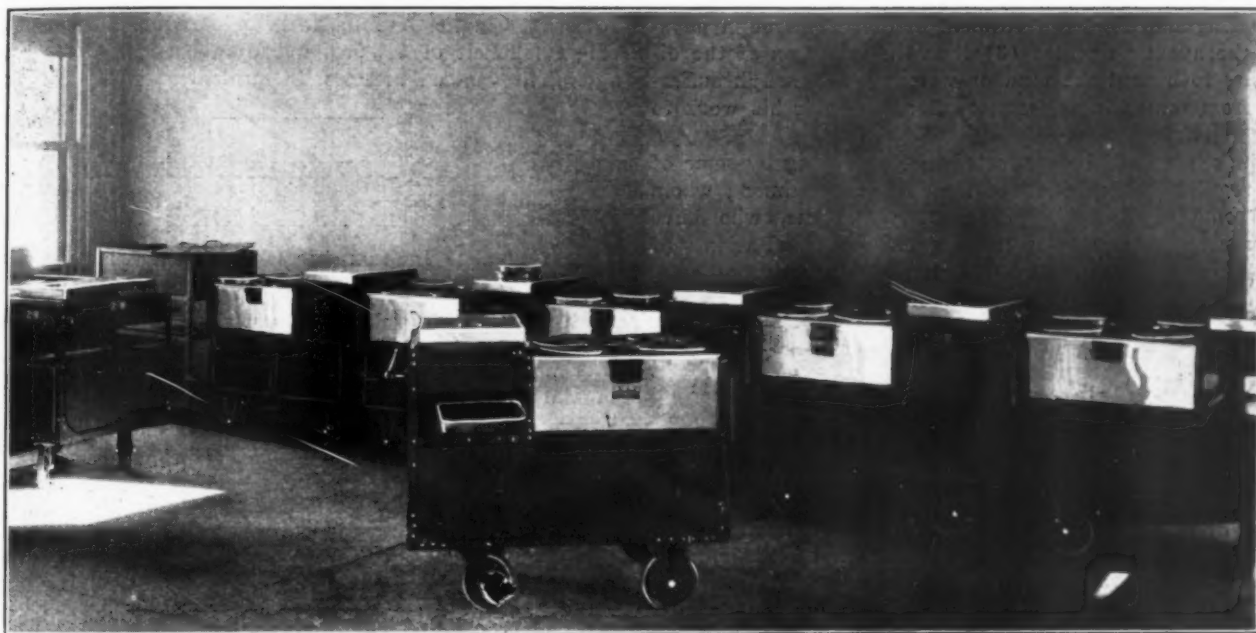
It has been announced that A. E. Fitkin has set aside a sum of \$1,000,000 to build and endow a hospital and home for crippled children on the New Jersey state highway, between Eatontown and Freehold in Shrewsbury Township, to be known as the Raleigh Fitkin Memorial Institution, in memory of his son who died twenty-three years ago. A self-sustaining farm will be operated in connection with the institution which will endeavor not only to improve the physical condition of crippled children, but to give them an education.

The building is to cost not less than \$350,000 and the remainder of the gift will be used to place the institution in operation. There will be no connection between the home and the hospital and any other institution.

Health Clinic Reopened

The Post-Graduate Medical School and Hospital, New York, has reopened its health service clinic at Second Avenue and East Twentieth Street. The clinic provides a diagnostic health examination at a nominal fee. A dentist has been added to the staff.

System is the watchword at the new U. of M. Hospital A fleet of Ideals handles the food distribution



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News of the Month

Boston Clinic Opens Physical Therapy Department

The Reconstruction Clinic at 366 Commonwealth Avenue, Boston, has opened to the public its department of physical therapeutics, according to the *Medical Journal and Record*. This step was decided upon by the directors for three reasons: (1) The abuse and misuse by nonmedical men of physical therapeutics; (2) the lack of institutional facilities in Boston, as well as in New England, for the treatment of disease through physical therapeutic agents; (3) it is the intention of the directors to benefit the man or woman who, though suffering from some illness, cannot afford to leave his work to seek relief.

The clinics will be conducted in the evening by some of the regular medical staff of the institution, among whom are some of Boston's prominent physicians, who have volunteered their service free for this cause. Patients of limited means only will be received, irrespective of race, creed or color, resident or nonresident.

Ontario Mental Hospital System Reorganized

The provincial mental hospital system of Ontario has been reorganized, says the *Hospital, Medical and Nursing World*, and a fully qualified and specially trained specialist in psychiatry is at the head of each institution. In addition, all have psychiatrists as assistant superintendents. The last link in the chain was completed recently with the appointment of Dr. B. T. McGhie to the superintendency of the Hospital for Feeble-Minded, Orillia. It is hoped to make this hospital one of the leading hospitals of its kind in the Dominion.

Fishermen Build Their Own Hospital

Juan Fernandez Island has a hospital which has been built by the fishermen who make their homes there. The island has a population of about 287, is fruitful and is the base of a lobster fishery. The hospital has an operating room but there is no physician on the island. When a patient is received information regarding his symptoms is sent by wireless to Valparaiso, 370 miles distant, and medical advice is wirelessed back. If an operation is necessary a surgeon is sent over from Valparaiso.

Ground Broken for Neurological Institute

Ground was broken recently for the new building of the Neurological Institute of New York City, at the new medical center. The structure will cost approximately \$1,400,000. It will be fourteen stories in height and will be built in three sections, one with 130 ward beds, a second with fifty rooms for private patients, and a third for nurses and interns.

A whole floor will be devoted to physiotherapy, hydrotherapy, mechanotherapy, heliotherapy, electrotherapy, and massage. An operating suite for neurosurgery and complete equipment for x-ray diagnosis and treatment are included.

Benefit Shop Reduces Deficit

A sub-committee of the women's auxiliary of the Germantown Hospital, Philadelphia, runs a benefit shop at 157 East Cheltenham Avenue, to help to reduce the hospital's original deficit of \$75,000, which was assumed six years ago. The venture meets with marked success.

French Government Honors Dr. Jackson

Dr. Chevalier Jackson, head of the bronchoscopic clinic, Jefferson Hospital, Philadelphia, was recently honored by the French Government by having conferred on him the cross of a chevalier of the legion of honor. The award was made by Dr. J. M. Lemee of the American Hospital in Paris, acting on behalf of the French Government. In 1926 Dr. Jackson received the Philadelphia award for having performed the greatest service to humanity during the year 1926 of any citizen of the city.

Work to Start Soon on New State Hospital

Ground is soon to be broken for the new Metropolitan State Hospital at Waltham, Mass., with sections in Belmont and Lexington.

The building of the new institution was urged by Governor Fuller in his annual message to the Legislature last January. The ultimate cost will reach \$5,000,000 and there will be accommodations for 2,000 patients and 500 employees. There will be fifty buildings, covering 330 acres of land.

As a start on this project \$1,500,000 was made available in 1927. The plans have in large measure been completed and the land secured. Governor Fuller has urged that the new hospital be developed as rapidly as possible.

Connecticut Committee to Consider State Appropriations

"A special committee of the Connecticut Hospital Association, of which Joseph J. Weber, superintendent, Grace Hospital, New Haven, Conn., is chairman, has been appointed to analyze the present situation concerning recommendations for the improvement of the system. The other members of the committee are Frank W. Bogardus, member of the board of directors, Stamford Hospital, Stamford, Conn., and F. E. Sands, member of the board of directors, Meriden Hospital, Meriden, Conn."

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Among the Associations

Gathering Information for Frisco Meeting

Plans are well under way for the presentation of ways and means of reaching California and the next meeting of the American Hospital Association to be held in San Francisco, taking Chicago as the starting point.

At the Minneapolis meeting Dr. Paul W. Wipperman, superintendent, Decatur and Macon County Hospital, Decatur, Ill., president of the Hospital Association of the State of Illinois, appointed a committee to be known as the "On to California" committee whose duty it would be to gather all information regarding the trip from points in Illinois to San Francisco.

At a recent meeting of the committee held in the offices of THE MODERN HOSPITAL, Chicago, it was decided that inasmuch as Chicago would be the transfer point for people coming from eastern states, and St. Louis the transfer point for people coming from the southern states, this committee could function best if it gleaned all the information pertaining to the trip and disseminated it to those who will change trains at Chicago and St. Louis on their way to San Francisco.

The committee is now getting together data for several kinds of trips, one to be direct from Chicago to San Francisco with only limited stop-overs, another to be by the northern route and a third by the southern route. Arrangements for special trains, special cars, stop-overs of interest to hospitals and points of national interest, cost of trips, including meals and hotel accommodations, are now being made, and it is expected that by March or April a comprehensive report will be ready for presentation to the various state and sectional meetings throughout the United States.

The meeting of the American Hospital Association is scheduled for August 6 to 10, and the dates for the meeting of the Protestant Hospital Association are August 4, 5 and 6. The committee is now working on plans that will get all visitors to the meeting early on the morning of August 4, so that those who wish to attend the meeting of the Protestant Association may do so, while others will have mapped out for them trips to interesting hospitals in that section of the country. Some information is already available and may be obtained by writing to John A. McNamara, chairman of the Illinois "On to California" committee, 660 Cass Street, Chicago.

American Physiotherapy Association to Meet in Minneapolis

The American Physiotherapy Association will hold its seventh annual convention at Minneapolis, Minn., at the Curtis Hotel, June 11 to 14, 1928. The Minnesota Chapter, the tenth to be admitted to the association will act as hostess and will make local arrangements.

The needs of the vocational bureau, instituted about two years ago for the benefit of members and physicians seeking physiotherapy assistants, have grown to such an extent that it was deemed necessary to do some advertising.

The revised constitution of the Chicago Chapter was approved at a recent meeting of the executive committee. The Chicago Chapter held its December meeting on the sixth of the month. H. J. Holmquest, secretary of the council on physical therapy of the American Medical Association, was the speaker.

Pennsylvania Association Honors Its Former Secretary

A meeting of the officers and trustees of the Hospital Association of Pennsylvania was held at Wilkes-Barre, Pa., on October 29 for the purpose of presenting a chest of silver in a mahogany case to John M. Smith, director, Hahnemann Hospital, Philadelphia, in recognition of his valuable services to the association over a period of six years.

At this meeting the trustees of the association fixed the dates for the annual conference of the association, which is to be held at the Hotel Schenley, Pittsburgh, March 27, 28 and 29, 1928.

Northwest Hospital Association Meeting Is Well Attended

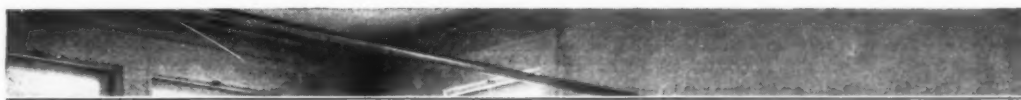
A two-day meeting of the Northwest Hospital Association was held on Monday and Tuesday, November 14 and 15, at the Olympic Hotel, Seattle, Wash., and was attended by more than seventy-five members from the states represented in the association.

Emily Loveridge, superintendent, Good Samaritan Hospital, Portland, Ore., presided at the opening session, and prayer was offered by the Rev. Ambrose Bailey, D.D. An address of welcome was given by Mrs. Bertha Landes, Mayor of Seattle, and R. W. Nelson, superintendent, Portland Sanitarium, Portland, gave the response.

Following the reports of the committees and officers, Helen Teal of the Red Cross Visiting Nursing Service, Seattle, read a paper entitled, "One of Seattle's Methods of Meeting a Community Need." Miss Teal outlined the work that her organization is doing and told of its value to the general hospitalization of the community. Effie Raitt, University of Washington, Seattle, was the second speaker on the morning program, and told of the development in the student dietitian's work during the past few years. Both papers were discussed by Evelyn Hall, superintendent, Seattle General Hospital, Seattle.

Miss Loveridge read the president's address at the opening session on Monday afternoon. The first paper following the address was read by Grace Phelps, superintendent, Doernbecher Hospital, Portland, Oregon, and was entitled "Recent Development in Children's Work." This paper was ably discussed by Olive Kerry, treasurer, Children's Orthopedic Hospital, Seattle.

"What Should a School of Nursing Give to Its Students?" was the subject dealt with by Mrs. Elizabeth Soule, University of Washington, and discussed by Mrs. Cecile Tracy Spry, superintendent of Nurses, Tacoma Gen-



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Among the Associations

eral Hospital, Tacoma, Wash., and by Jane Donald, Everett General Hospital, Everett, Wash.

C. J. Cummings, superintendent, Tacoma General Hospital, Tacoma, Wash., presented an interesting paper on the subject "The Year's Progress in Hospital Work," and the afternoon session ended with a round table conducted by Mary Loomis, superintendent, Seattle City Hospital, Seattle.

At six o'clock the banquet was held, when Robert Jones, executive secretary, Washington State Public Health League, was the speaker. Mr. Jones took as his theme, "The Public in the Community Health Program." Dr. C. T. Hanley, City Health Commissioner, Seattle, was the next speaker. He told of the work that was being done in Seattle on a community health program and the part that the hospitals in the community were playing. Elizabeth Fox gave an account of the Red Cross work that was done in the Mississippi River area, and the Rev. Mark A. Matthews, D.D., Seattle, concluded the program with a dissertation on the church in the community health program.

Clinics were held in various hospitals during Tuesday.

Five Two-Day Meetings to Be Held by A. C. of S.

The following sectional two-day meetings are to be held during the month of January by the American College of Surgeons, in connection with the hospital standardization movement: January 12 and 13, Brooklyn, N. Y., for the State of New York; January 16 and 17, Wilmington, Del., for Pennsylvania, New Jersey and Delaware; January 19 and 20, Roanoke, Va., for Virginia, West Virginia, Maryland and District of Columbia; January 23 and 24, Spartanburg, S. C., for North Carolina and South Carolina; January 26 and 27, Tampa, Fla., for Florida, Georgia, Mississippi, Louisiana and Alabama.

Coincident with the meeting at Spartanburg, will be held a meeting of the North Carolina Hospital Association, on January 24 and 25.

Nursing Problems Discussed at Meeting in Baton Rouge

The Louisiana League of Nursing Education held its third annual meeting in Baton Rouge at Our Lady of the Lake Sanatorium, on October 25, in conjunction with the Louisiana State Nurses Association.

The program included an instructive talk by Dr. Ellen A. Reynolds, head of department home economics, Louisiana State University, on the "Opportunities of the Graduate Nurse in College." Dr. Reynolds stated that the registered nurses are doing excellent work, but present day progress makes demands for women with a broader educational viewpoint.

The round table conference, presided over by Sister Kostka, gave additional information on schools of nursing topics. The work of the grading committee was again brought out with new emphasis by J. C. Tebo, secretary,

Louisiana Nurses' Board of Examiners, who urged the members of the league to cooperate by returning the blanks to headquarters of the committee, with the desired information.

A report on a state standard curriculum for Louisiana was presented for adoption by Mrs. Annie L. Smith. Affiliation in general was discussed by Willie Filgo, Monroe, La. Other miscellaneous problems were introduced and fully discussed.

At the business session the league pledged financial assistance, according to its means, to the grading committee.

A. N. A. to Study Nurses' Registries

The American Nurses' Association is turning its attention more than ever before to studies of nurses' registries in order to determine what is their most useful function as it relates to the patient, the doctor and the nurse.

An average registry today supplies a hospital with nurses for full time duty, as it demands them. Would it be possible, it is asked, to diversify this service so that the hospital might engage in addition to a full time service, some part time service during especially busy hours of daily routine and for certain special occasions that make unusual demands on the nursing staff?

A brief preliminary scanning of the subject indicates that while in some instances close cooperation exists between the hospital and the nurses' registries, there is ample room for a service much more flexible and mutually advantageous.

Beginning with the January number, the *American Journal of Nursing* will publish a complete list of all the official nurses' registries in the United States, an official registry having been defined by the board of directors of the American Nurses' Association as one that is conducted under the auspices of an association affiliated with the American Nurses' Association, whose registrar is a salaried executive.

It is hoped by this and by other means to develop by degrees a closely knit chain of nursing bureaus, which will not only be able to serve their respective cities and towns, but will have facilities for supplementing the nursing supply for other communities when epidemics or other nursing emergencies arise. Recognition is given to the fact that the registrar must be specially trained for her position, as it is generally realized that a supply of nursing service is too valuable a commodity to be handled as a side issue in a hospital office.

Many hospitals have somewhat reluctantly relinquished registries conducted from their own office to participate with other institutions in a central official registry, and have found that they could obtain as efficient nursing service as they were able to obtain alone. Recently a registry in a western city reported that it has made a thorough study of all phases of group nursing in hospitals in order that it may be ready to meet the demand in case a hospital in that city wants it. This is a splendid example of a registry being willing to anticipate the needs of a hospital.



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Among the Associations

A number of registries have also given the hospital fine cooperation as the patients are discharged, by furnishing hourly nursing service to those who still need care for a comparatively short time daily. In many cases it would be impossible for the patient to leave the institution were this service not available.

Hospital trustees are showing their strong interest in nursing in its relation to the community, by serving on the boards of registries. This contact is particularly valuable to the registry, because, like all entities that live too much alone, it might otherwise become too self-centered.

It is hoped that the serious and whole-hearted attention that nurses are now turning upon their registry problems will result in the broadening of registries to meet every type of nursing need.

The questions nurses are asking show that they appreciate that the community, the doctor and the hospital have a legitimate interest in the way the registry functions. It will be through the cooperation of all three that the registry will reach its most perfect development and that all three will be most efficiently served.

First Hospital Institute Held in Buffalo

The first Hospital College Institute ever held in the United States occurred at Canisius College, Buffalo, N. Y., during the week of November 28 to December 3. This course was planned by Father Moulinier, S.J., president of the Catholic Hospital Association and regent of the college of hospital administration of Marquette University, Milwaukee, Wis., and was conducted under the local direction of Father John P. Boland, Ph.D., D.D., diocesan director of hospitals for Buffalo. Father Cusick, S.J.,

president, Canisius College, placed the facilities of the college at the disposal of the institute and welcomed the students. At close of the institute a general health meeting for all the Sisters of the diocese of Buffalo and vicinity was held in the Canisius gymnasium, with an attendance of nearly six hundred.

Thirty-three students registered and attended all lectures of the institute. These students represented hospitals in Buffalo, Niagara Falls, Binghamton, Elmira, Rochester, Syracuse, Batavia, Albany and other New York points, as well as Baltimore, Md.

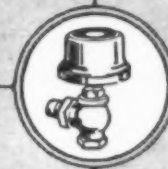
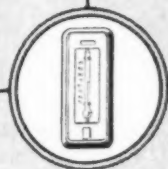
The lectures and discussions covered problems of organization, construction, interior art and administration, now confronting hospital executives. The questionnaire returned unsigned by each student at the close of the institute indicated a unanimous approval of the institute form and the lectures, and gave valuable suggestions for institutes to follow in other cities.

This institute was the first of a series contemplated by the college of hospital administration and the Catholic Hospital Association to occur in important hospital centers of the United States, such as Buffalo, Detroit, Brooklyn, Cincinnati, St. Louis and elsewhere. The next institute will be held at Detroit University, Detroit, under the auspices of Rev. John P. McNichols, S.J., president of the university. The institutes have been designed to extend into the field the very successful short courses already held at the college of hospital administration in Milwaukee. They meet the need of hospital centers for short courses that are available to the hospital worker without his leaving his station. The results at Buffalo were extremely gratifying and indicate the probable reception of these institutes elsewhere in the field.

The program at the Buffalo institute covered many important subjects of general interest and was taken part in by leaders in the hospital field. At the concluding session a general round table conference was held.



A group of Sisters who attended the meeting.



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Among the Associations

Alberta Hospitals Association Holds Profitable Conference

THE meeting of the Alberta Hospitals Association, of which Dr. H. R. Smith, superintendent, Royal Alexandra Hospital, Edmonton, is president, took place at Edmonton on November 21 and 22, in conjoint convention with the Alberta Association of Registered Nurses and the Alberta Municipal Hospitals Association. The meeting was a success throughout, for several reasons:

There was a good program of well prepared addresses, papers, and general discussions on practical subjects pertaining to the actual problems facing the hospitals of the province.

The meeting was held conjointly with allied associations, the Alberta Association of Registered Nurses and the Alberta Municipal Hospitals Association.

There was a splendid display of educational exhibits demonstrating the best features of administration in many of the hospitals of Alberta. The program was conducted in a businesslike manner.

Every person named on the program was present and presented his material audibly and as one who knew his topic.

The sessions were well attended, the last one having the record attendance.

A large public meeting was held the first night in association with the convention, at which addresses were given on health, hospitals, and nursing.

There were excellent press reports throughout the entire conference, giving the public an opportunity to follow the proceedings with profit.

Legislative Topics Discussed

The high lights of the various papers were as follows:

The president's address reviewed a year of activity, particular attention being paid to legislation and hospital policy, which indicated clearly that the various committees of the association had been active throughout the year looking after the interests of the hospitals of the province. D. K. Knott, chairman of the Royal Alexandra Hospital board, gave an interesting talk on the impressions received from a visit to the American Hospital Association convention and the convention of the American Protestant Hospital Association in Minneapolis.

E. E. Dutton, Galt Hospital, Lethbridge, spoke on the "Relationship of the Public Health Department to Hospitals." In the Province of Alberta the public health department is in far closer contact with hospitals than is perhaps the case in any other state or province. This is quite evident from the regulations that the province has made pertaining to hospitals. The keynote of Mr. Dutton's paper was that of sympathetic cooperation between the hospitals and the department.

At the end of each session Dr. M. T. MacEachern, associate director, American College of Surgeons and director of hospital activities, Chicago, summarized the papers and conducted a round table conference. In closing

the morning session he pointed out the value of associations such as was then in session. He said: "Provincial and state hospital associations have a distinct place to fill today in promoting hospital work. Each association, through its meetings, must contribute to the science of hospital administration by study and discussion of various problems. An association such as this should be active throughout the year, and should pay particular attention to administrative legislation and educational standards."

At the round table conference considerable time was taken up in discussing the care of indigent patients. It was found that the word "indigent" was difficult to interpret. It was suggested that each municipality be responsible for its patients sent to other municipalities, regardless of whether or not the patient is indigent.

A combined luncheon of the Alberta Hospitals Association and Alberta Association of Registered Nurses was held, at which short addresses were given by some of the visiting delegates.

The afternoon session opened with an address by Dr. E. A. Braithwaite, inspector of hospitals for Alberta, in which he reviewed fifty-four hospital regulations laid

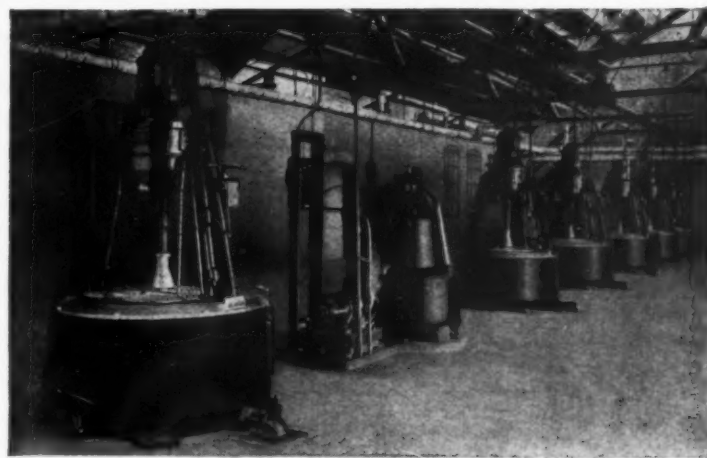


The exhibit of the Royal Alexandra Hospital.

down by the department of health, which serve as a guide for the hospitals throughout the province. Father Cameron, Holy Cross Hospital, Calgary, gave an interesting talk on hospital standardization, showing where it had brought about better cooperation, more scientific work, and improvement in service to the patient.

Dr. M. A. R. Young, Lamont Hospital, Lamont, in his paper "X-Ray Problems of a Small Hospital," emphasized some of the physical difficulties of securing x-ray service,

(Continued on page 160)



SIX TOLHURST EXTRACTORS

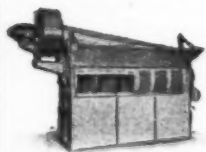
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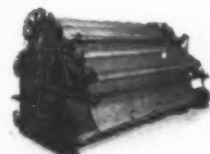
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Hospital
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Personals

CHARLES E. FINDLAY, for the past two years assistant superintendent of Starling-Loving Hospital, Columbus, Ohio, has recently been appointed acting superintendent of that institution succeeding DR. S. A. HATFIELD who resigned to enter active practice. Mr. Findlay was formerly connected with the college of medicine, Ohio State University, Columbus, Ohio, for a number of years.

DR. R. WILSON SHELLEY has resigned the superintendency of the Niagara County Tuberculosis Sanatorium, Lockport, N. Y., to enter private practice. He will be succeeded by DR. O. C. REEVE who has been assistant superintendent of this institution during the past summer.

GLADYS KNUTSON is the new superintendent of the Virginia Gay Memorial Hospital, Vinton, Iowa, which recently reopened after having been closed for over a year because of lack of funds.

DR. RALPH L. HILL has resigned the superintendency of the Allegheny County Home and Hospital, Woodville, Pa., to become assistant superintendent of the State Hospital at Wernersville, Pa. Dr. Hill will be succeeded at Woodville by DR. G. A. McCracken, formerly on the staff of that institution.

MILDRED LINDALL has recently been appointed superintendent of the Warren Hospital, Phillipsburg, Pa., succeeding STELLA LOUX who resigned to be married.

ELLEN G. GIBSON has resigned as superintendent of St. Margaret's House, Albany, N. Y., after nineteen years in that position. Miss Gibson plans to return to Scotland next summer.

VERA E. KEYES is the new superintendent of the Millville Hospital, Millville, N. J.

MRS. GEORGE TANN, supervisor of the nurse and delivery room at Mercy Hospital, Hamilton, Ohio, until her marriage last year, recently died in that hospital following a cesarean operation.

LYDIA THOMPSON has received the appointment of superintendent of the new Clinton Memorial Hospital to be opened soon at St. John's, Mich.

THERESA M. NORBERG has recently assumed the superintendency of the new Southeast Missouri Hospital, Cape Girardeau, Mo.

LOUISE SWAN is the new superintendent of the Tucker Hospital, Elkhart, Kans.

MRS. FLORENCE J. WILSON is the new superintendent of the Daviess County Hospital, Washington, Ind., succeeding MRS. NETTIE KENNEDY, resigned.

V. M. DUCKWORTH is the new superintendent of the Mercedes General Hospital, Mercedes, Texas.

DR. B. W. CALDWELL has tendered his resignation as superintendent of the Tampa Municipal Hospital, Tampa,

Fla., effective January 1 or when a successor can be appointed.

NORTH B. FELAND recently assumed the superintendency of the Frances Hoyt Mahon Deaconess Hospital, Glasgow, Mont.

J. E. SHOUSE is the new superintendent of the Knoxville General Hospital, Knoxville, Tenn., succeeding J. H. MAUNEY who resigned to devote his time to the enlarged Riverside-Fort Sanders Hospital, Knoxville, of which he is secretary.

NINA M. DENVER, formerly assistant superintendent of the Methodist Episcopal Deaconess Hospital, Louisville, Ky., is now the superintendent of that institution.

DR. W. A. HODGES is the new medical director and superintendent of the Elm Grove Sanatorium, Bushnell, Ill.

CORINNE B. HENDERSON, R.N., has recently been appointed superintendent of the Memorial Hospital of Laramie County, Cheyenne, Wyo.

CHRISTINA SAGE, R.N., is the new superintendent of the Neepawa General Hospital, Neepawa, Manitoba.

MELVIN L. SUTLEY, formerly assistant superintendent of the Pennsylvania Hospital, Philadelphia, has been appointed superintendent of the Delaware County Hospital, Upper Darby, Pa., succeeding RENA P. FOX, resigned. MR. SUTLEY will be succeeded at the Pennsylvania Hospital by J. N. HATFIELD.

KATHLEEN PURCELL, R.N., is the new superintendent of the Berks County Tuberculosis Sanatorium, Reading, Pa.

DR. B. HENRY MASON, formerly assistant superintendent of the Peter Bent Brigham Hospital, Boston, has been appointed superintendent of the Waterbury Hospital, Waterbury, Conn., succeeding CHARLES LEE, resigned. DR. LESLIE H. WRIGHT will succeed DR. MASON at Peter Bent Brigham.

DR. GEORGE A. MACIVER has received the appointment to the superintendency of the Worcester City Hospital, Worcester, Mass., succeeding DR. C. A. DREW. DR. MACIVER was formerly assistant superintendent of the Massachusetts General Hospital, Boston.

DR. H. F. SPILLERS has resigned as superintendent of the Ohio Valley General Hospital, Wheeling, W. Va., to take up the work of general inspection in state hospitals.

A. T. THOMSON, business manager of the Good Samaritan Hospital, Portland, Ore., died recently. The vacancy will be filled by A. H. MORRILL of that city.

RUTH BOWDEN, B.S., has recently been appointed head of the dietetic research department of the California Fruit Growers' Exchange.

DR. EDGAR A. BOCOCK has been appointed superintendent of the Gallinger Municipal Hospital, Washington, D. C., succeeding MAJOR E. W. PATTERSON. DR. BOCOCK was formerly superintendent of the Colorado General Hospital, Denver, Colo.



Down from Canada came tales of a wonderful beverage

For years and years, visitors to Canada had come back with tales of a wonderful ginger ale. They described its exquisite flavor—they told of drinking it in the Houses of Parliament in Ottawa, in the residence of Governor-General, and in the Royal Canadian Yacht Club.

Friends would listen and smack their lips and ask if there wasn't some way to purchase it in this country. And the answer was always "No."

Finally, however, the demand became so insistent that it was decided to open a branch in this country, and in 1921 "Canada Dry" for the first time was officially brought to the United States.

Today, "Canada Dry" is known the wide world over and its phenomenal growth in public favor is one of the most inspiring stories of success in the history of American business. The reason for the remarkable success of "Canada Dry" is simply that it is a real ginger ale, made from real Jamaica ginger.

Many ginger ales contain capsicum to give them an artificial bite. These ginger ales bite the tongue and burn the lips. They produce flatulence. But not only is "Canada Dry" preferred by patients because of its flavor, but also "Canada Dry" in an excellent stomachic. The next time the case management calls for a carbonated beverage, suggest "Canada Dry."

“CANADA DRY”

Reg. U. S. Pat. Off.

“The Champagne of Ginger Ales”

Extract imported from Canada and bottled in the U. S. A. by Canada Dry Ginger Ale, Incorporated, 25 W. 43rd Street, New York, N. Y. In Canada, J. J. McLaughlin Limited. Established 1890.

NURSING AND THE HOSPITAL

Conducted by M. HELENA MC MILLAN, R. N.,
Director, School of Nursing, Presbyterian Hospital, Chicago

Considering the Nurse in Hospital Construction

By ALICE SHEPARD GILMAN

Hospital Consultant and Adviser on Nursing Service, Albany, N. Y.

THAT the hospital is a philanthropic institution and cannot properly be made to pay for itself is not only a truism but a tradition that has been impressed for many years on a long-suffering and generous public.

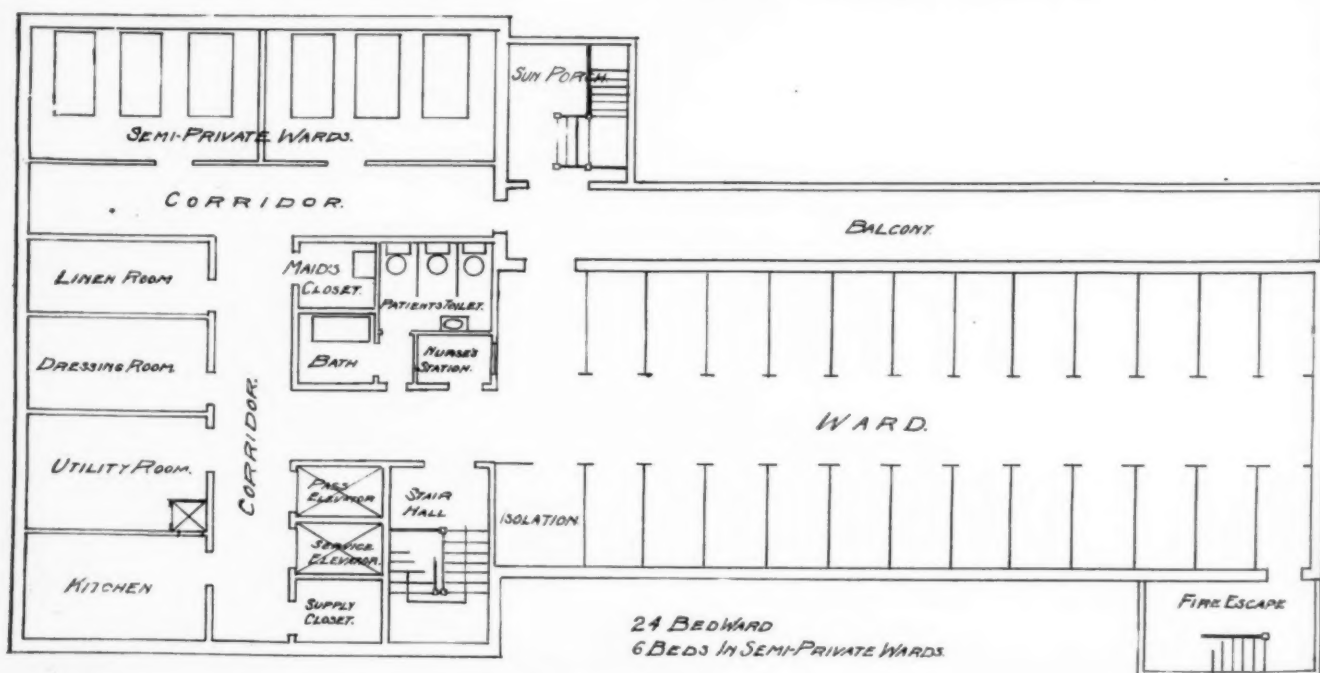
But now this public is awakened to the fact that though the hospital charges for service are constantly increasing, there is no let-up on the demand for private contributions toward the support of these institutions. And even the most generous of the contributors, when faced by the annual deficit, are beginning to ask what the end will be.

Two methods are open to avoid making the hospital too heavy a financial burden on the community which it serves. First, to increase the revenue or, second, to decrease the operating cost. With the demand for lower hospital rates there is little possibility of deriving more revenue from the patients, so that the second alternative is

the only one left open for those who administer hospitals.

In going over the hospital budget to see where savings may be effected, the size of the pay roll is at once apparent. In fact it is generally the largest item of expense. Therefore if means can be found to lessen the number of persons employed, both in the professional and domestic personnel, without impairing the care of the patient, a sound method of reducing operating cost is available. If means can be devised by which three persons can satisfactorily do the work of four in the various departments throughout the institution, the aggregate saving is appreciable.

Poor working arrangements cause not only a waste of the employees' time but also a waste of the community's money, which is contributed toward the support of the hospital. In hospitals constructed before this era of high



WARD UNIT-EXHIBIT-A.

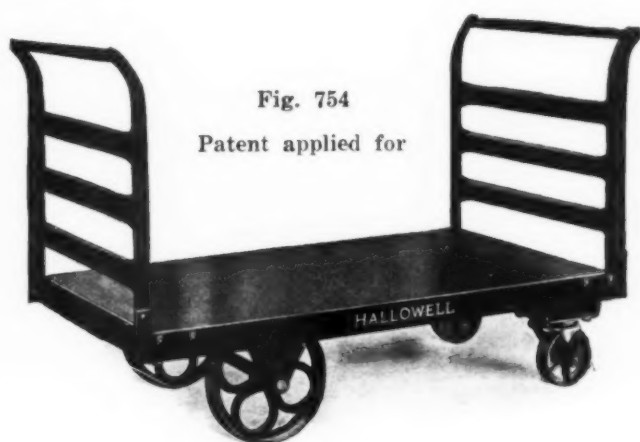


Fig. 754
Patent applied for

For hospital store-rooms, laundries, kitchens—sturdy, will stand hard usage and last almost forever.

The platform tops and racks of the "Hallowell" noiseless steel trucks are always smooth, no splinters to damage and tear. Unlike wood, steel never gets soggy, smelly and unsanitary so objectionable in any department of a hospital.

And the "Hallowell" noiseless steel trucks won't get wobbly in the joints—there aren't any, so in the long run they cost less than wooden ones and last almost forever. Incidentally the "Hallowell" noiseless is absolutely fireproof.

40 styles and sizes with ball bearing
and rubber tired wheel



Fig. 732
Pat'd and Pats. Pend'g

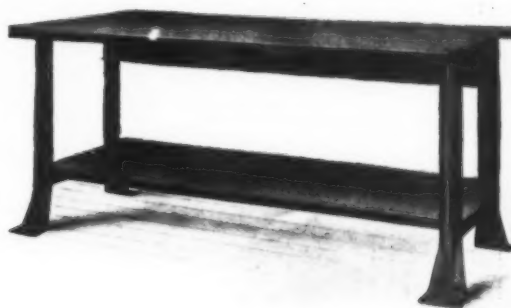


Fig. 709
Pat'd and Pats. Pend'g

"Hallowell" steel tables and work benches are *permanent* equipment—ideal for engine room, repair shop and electrician's use. Last a lifetime. Can be moved as often as necessary. Can't splinter, wobble or burn. *Picked up from stock.*

Write us—for complete illustrated bulletins

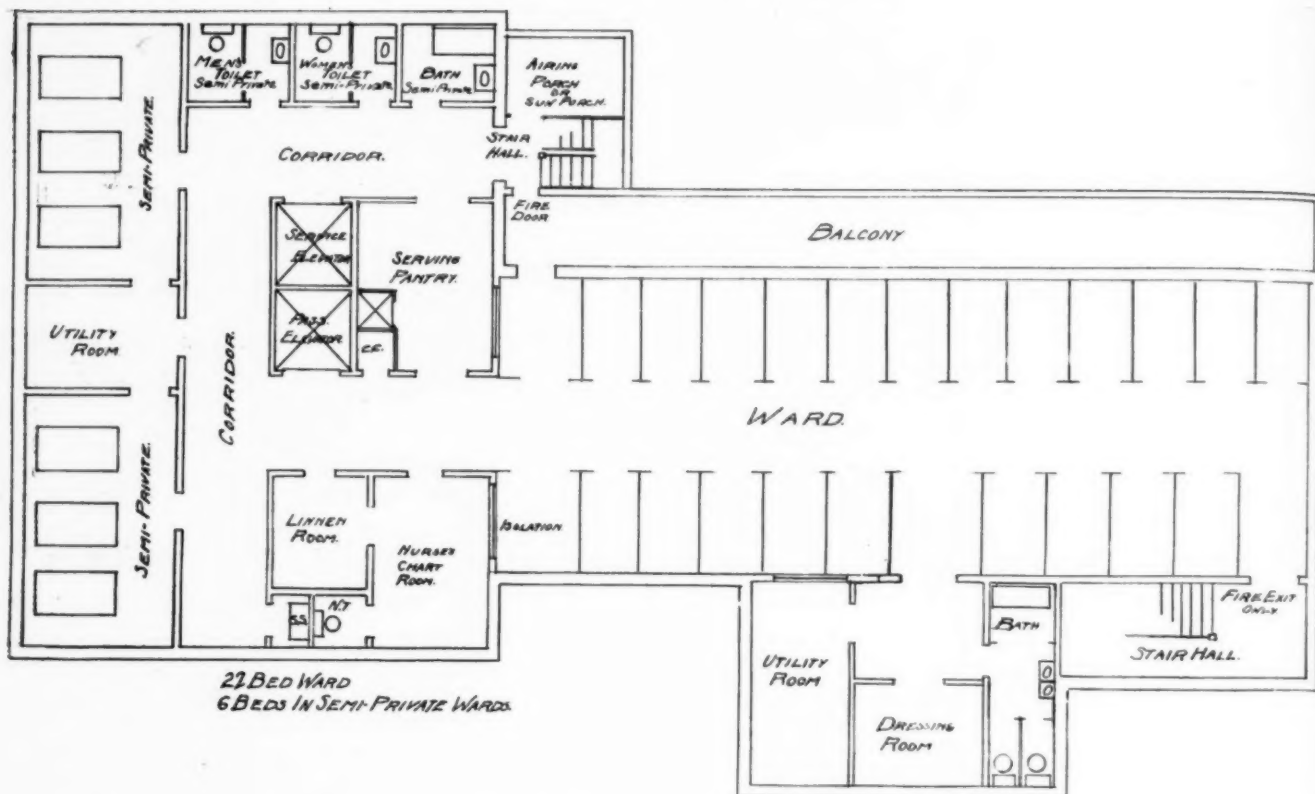
Standard PRESSED STEEL CO.



Box 31

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We carry large stocks at our branches: 28 N. Clinton St., Chicago, Ill. and 944 Harper Ave., Detroit, Mich.

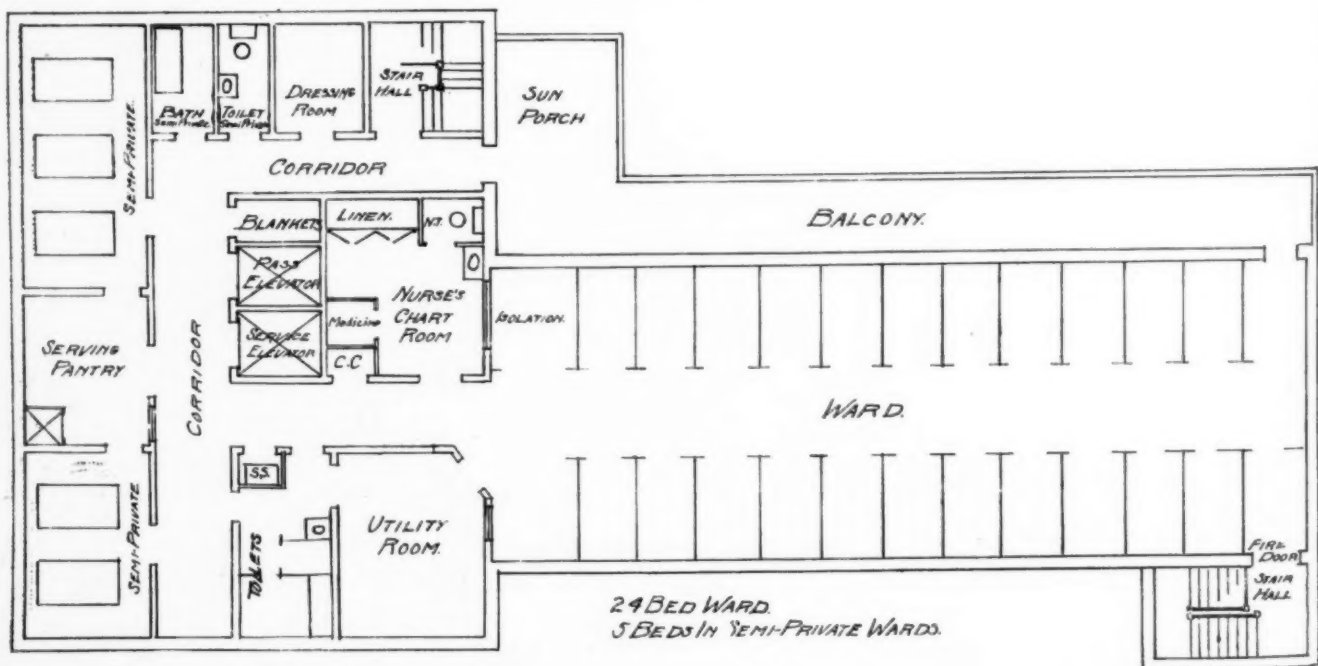


WARD UNIT-EXHIBIT-B.

wages, it is sometimes difficult to see where profitable changes in the plan of the building can be made, but in new construction there is no excuse for wasting the time of the workers in useless effort caused by inconvenient and thoughtless planning.

Construction that intelligently takes into consideration the human effort necessary to carry on the daily routine of these highly specialized institutions will avoid the gross errors made by those who have no intimate knowledge

of the intricate demands of the various groups employed there. It is difficult if not impossible for those who have not had the actual experience of being a part of these groups, to estimate accurately the needs of the various departments in relation to their importance to the institution as a whole, and their function as it relates to the patient. Proper grouping of facilities will simplify routing, lighten traffic and in the final analysis promote the comfort and well-being of the patient in the hospitals.



WARD-UNIT-EXHIBIT-C.

GUARANTEED

GRAIN



This guarantee appears on every container of Rossville grain alcohol. It is positive assurance that you are getting an alcohol that will not deteriorate nor lose its water-white clarity, its taste or odor. Look for this guarantee to be sure you are getting alcohol that is permanent in its quality.

ALCOHOL!

In any quantity—one gallon cans to 50 gallon drums
—from our own bonded warehouses at the following
convenient points:

THE ROSSVILLE COMPANY

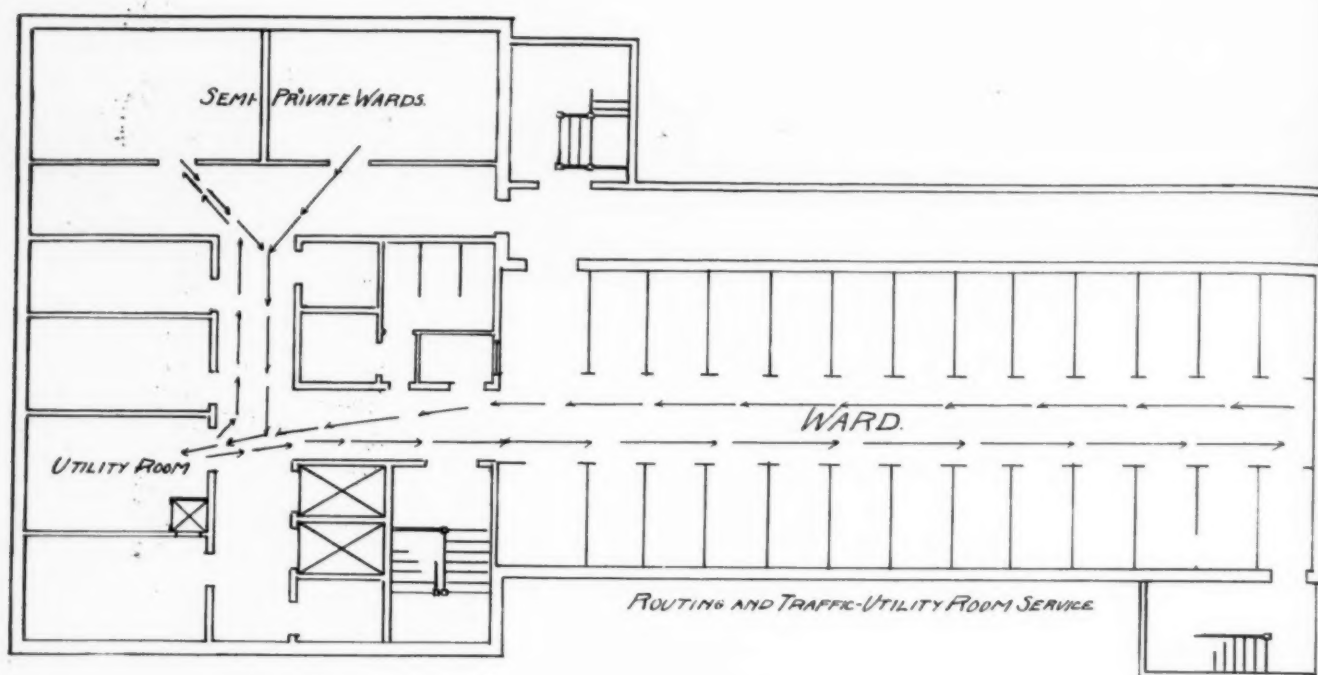
Baltimore, Md.—McCormick Bldg.,
Light and Barre Sts.
Buffalo, N. Y.—567-571 Michigan Ave.
Chicago, Ill.—323 West Polk St.
Cleveland, O.—1200 West Ninth St.

Charlestown, Mass.—10 Wiggins
Terminal.
50 Terminal St.
Detroit, Mich.—1931 Howard St.
Lawrenceburg, Ind. (Home Office)
New Orleans, La.

New York City, N. Y.—B. & O.
Stores.
26th St. and 11th Ave.
Philadelphia, Pa., 701-705 S. Front St.
Pittsburgh, Pa.—25th and Smallman
Streets.
St. Louis, Mo.—409 North Second St.

Rossville

THE SPIRIT OF THE NATION



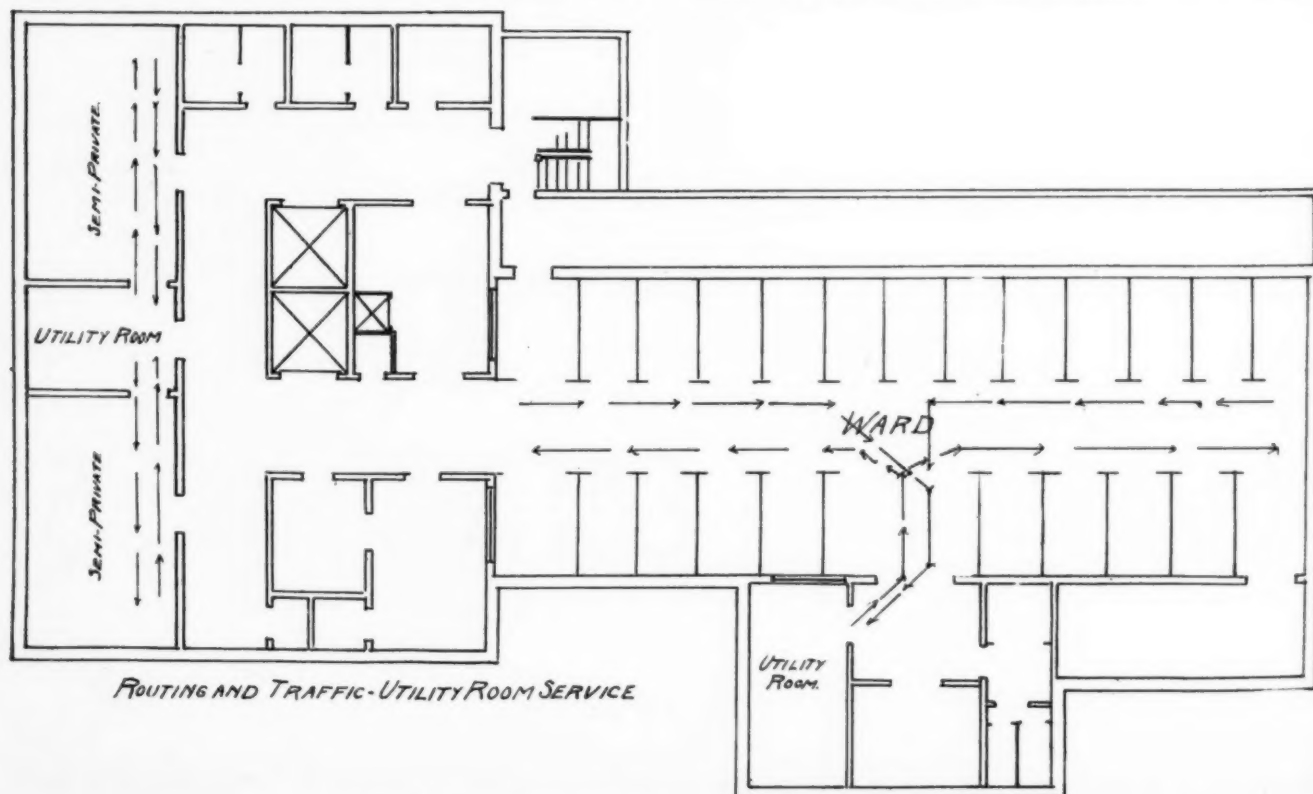
WARD UNIT EXHIBIT A

This article will deal with the nursing units in their relation to the patients that they must serve, special emphasis being placed on the location of the service rooms that carry the heaviest traffic over the twenty-four-hour period. The accompanying floor plans will illustrate the importance of placing these units in direct proximity to that portion of the patients' floor which accommodates the largest number of beds.

Ward Unit A is a typical example of a layout adopted by many institutions, particularly those maintaining large ward services. The arrangement as far as light and ex-

posure are concerned is beyond criticism. The plan fails, however, to take into consideration the important human element involved in the care of patients. The remote location of the utility room and diet kitchen place a heavy burden on the nursing staff, both from the standpoint of time-consuming travel and from that of supervision.

In contrast with Ward Unit A, two other plans are presented, following the same general scheme as far as the shape of the building and facilities for the accommodation of patients are concerned. These alternate plans, however, illustrate the advantages to be derived



WARD UNIT EXHIBIT B

Aged 6 months

Of the Two Ginger Ales Dietitians Prefer the GOLDEN

BOTH Clicquot Club Ginger Ales—the PALE DRY and the GOLDEN—are made with exceptional care from the choicest ingredients the world's markets afford. Both are aged six months to develop superfine flavor.

But the GOLDEN, because of its deeper tone . . . its full-rounded flavor . . . its more gently stimulating character, is recommended by its makers and preferred by most dietitians as the *better prescription ginger ale*.

For ordinary beverage purposes, use whichever you prefer. No finer ginger ales are to be had, no matter how much you pay.

THE CLICQUOT CLUB COMPANY
Millis, Mass.



Clicquot Club

GINGER ALE

Two Kinds—PALE DRY and GOLDEN

by placing these important service rooms in close proximity to the ward. Ward Unit B features the sanitary tower construction, with the ward service rooms placed midway of the ward proper. It is true that the bed capacity has been reduced by two and that the building cost will be increased about \$2,200 per floor, but the added expenditure for construction and loss of revenue from beds is not comparable to the aggregate saving in nursing service and the improved care of patients over a period of years.

The rearrangement of the service rooms in this layout effect a saving in traffic of 45 per cent over that required by Unit A.

In case, for any reason, it may not be practical to use the tower, the service rooms may be arranged in the manner indicated in Ward Unit C without increasing the building costs.

The accompanying diagrams and table present in graphic form the real economies to be effected through intelligent planning.

Table on Routing and Traffic of Utility Room Service

	Average distance in feet to each ward bed	Complete trip	Number of beds	Minimum number trips per bed in 12 hours	Miles per day	Totals
Exhibit A-1						
Ward	58	116	24	6	3.1	
Semi-private	30	60	6	6	.4	3.5
Exhibit B-1						
Ward	34	68	22	6	1.6	
Semi-Private	18	36	6	6	.2	1.8
Exhibit C-1						
Ward	37	74	24	6	2.	
Semi-Private	23	46	5	6	.3	2.2

Table on Routing and Traffic of Diet Kitchen Service

	Average distance in feet to each ward bed	Complete trip	Number of beds	Minimum number trips per bed in 12 hours	Miles per day	Totals
Exhibit A-2						
Ward	65	130	24	4	2.3	
Semi-Private	42	84	6	4	.3	2.6
Exhibit B-2						
Ward	41	82	22	4	1.3	
Semi-Private	20	40	6	4	.2	1.5
Exhibit C-2						
Ward	60	120	24	4	2.1	
Semi-Private	13	26	5	4	.1	2.2

Aggregate traffic between ward utility room and diet kitchen every twelve hours as follows: Ward Unit A, 6.1 miles, Ward B, 3.3 miles, Ward C, 4.4 miles.

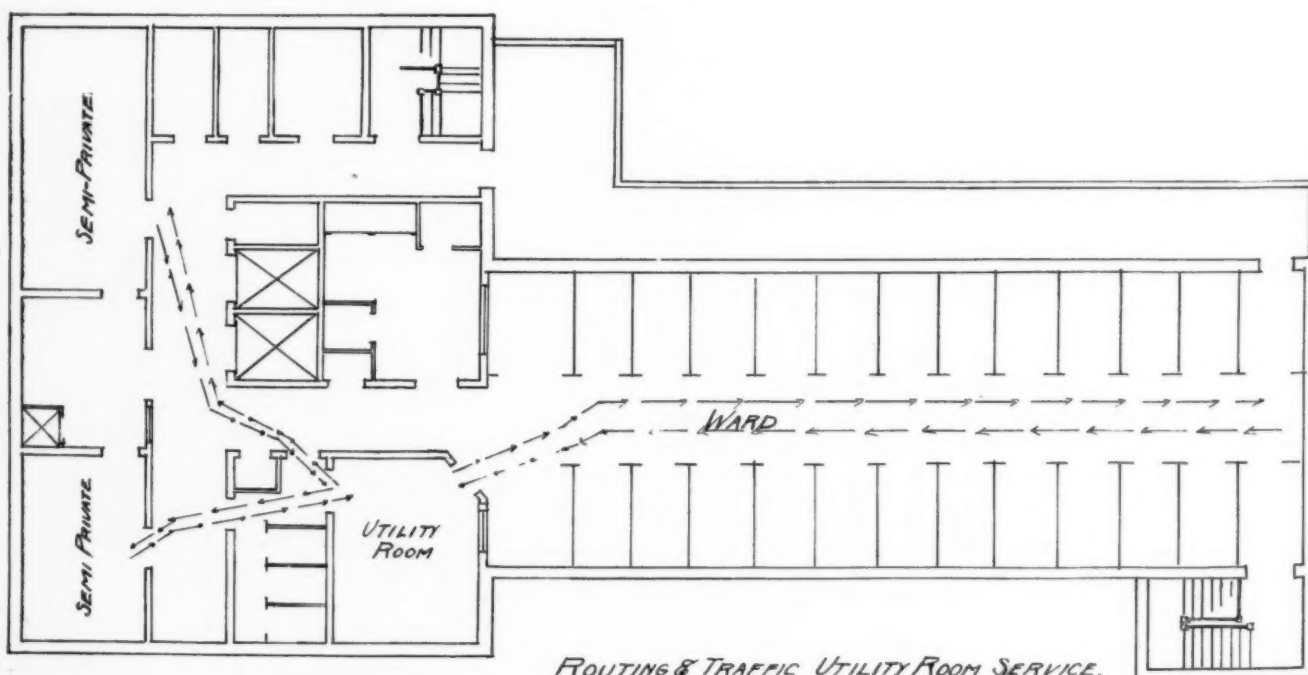
Estimated saving in traffic, Ward B, 45 per cent, Ward C, 28 per cent, over Ward Unit A.

Saving in Miles per Unit

	2 floors	3 floors	4 floors	5 floors	6 floors	Saving over Unit A
Ward Unit A..	12.2	18.3	24.4	30.5	36.6	
Ward Unit B..	6.6	9.9	13.2	16.5	19.8	17.8
Ward Unit C..	8.8	13.2	17.6	22	26.4	10.2

Further economies of time and effort may be effected if the service rooms are sufficiently large for the proper placement of equipment and routing of work. Many times it becomes necessary to distribute bedpans, hoppers and sterilizers in unventilated and unlighted closets, far from the center of activity, because the space assigned for utility purposes was entirely too small to accommodate even the most necessary equipment. The same criticism may be made of the diet kitchen and chart offices.

Another facility that has been quite generally overlooked is the ward toilet for the nursing staff. Nurses waste



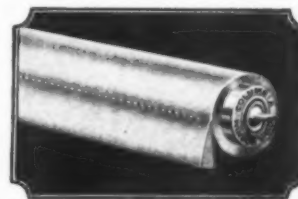
ROUTING & TRAFFIC UTILITY ROOM SERVICE.

WARD UNIT-EXHIBIT C.I.



MOUNT SINAI HOSPITAL
Chicago, Ill.

Architects:
Schmidt, Garden & Erikson



The superiority of *Columbia* Rollers is due in large measure to three unique features. *Feature 1.* A spring 30% to 40% stronger than that of ordinary rollers. This means greater lifting power and longer wear. *Feature 2.* Nickel-plated ferrules of brass instead of the usual steel—this makes the roller *rust-proof*—not just rust-resisting. *Feature 3.* A self-lubricating bearing—this insures smooth, silent operation so essential in hospital equipment.

What do wild claims *really mean?*

MOST of us are somewhat tired of manufacturers' over-statements. "Famous for durability!" reads one advertisement. "Long life!" shouts another. "Phenomenally durable!" roars a third. But what do such claims really mean?

Instead of claiming that our Damasko Heavy Duty Shade Cloth is "the most durable shade cloth made in America today"—we will simply call your attention to two facts which must be reckoned with in any purchase.

1. *Columbia* Window Shades in the Damasko Heavy Duty Shade Cloth have been installed in several hundred American buildings. Such important institutions as the Stevens Hotel, the Cincinnati Enquirer, and the Harvard School of Business—all bought by men who demand facts!

"But," you may object, "what does that prove? What I want to know is not where they have been installed but how they have acted after the installation."

A fair question. Here's the answer.

2. Recently we investigated a number of *Columbia* installations in hospital buildings. We found that, in many cases, the annual expense for repairs and replacements had amounted to no more than 25 cents for each \$100 of original investment.

Any \$100 spent on equipment that doesn't require more than a quarter's worth of repairs every year is a hundred dollars well spent.

The *Columbia* Mills, Inc.

225 FIFTH AVENUE, NEW YORK

Baltimore Boston Chicago Cincinnati Cleveland Dallas Detroit Fresno Kansas City Los Angeles
Minneapolis New Orleans Philadelphia Pittsburgh Portland (Ore.) St. Louis Salt Lake City San Francisco Seattle

Columbia GUARANTEED WINDOW SHADES
and ROLLERS

SEND THIS COUPON TODAY

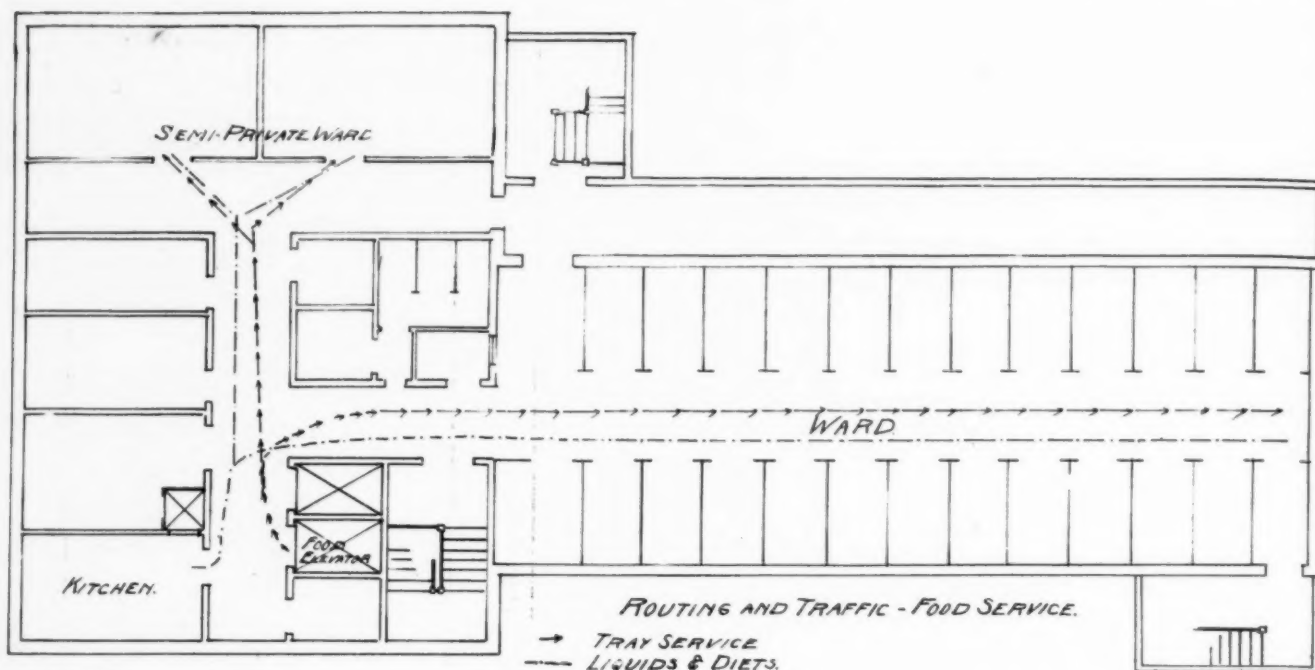
Let us send you a specimen shade roller and samples of *Columbia* Damasko Heavy Duty Shade Cloth. We will also include the "Standard Specification for Window Shades" which will save you much time and trouble. Just fill in the coupon and mail to *Columbia* Mills, Inc., 225 Fifth Avenue, New York.

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Street

City

M H 1-28



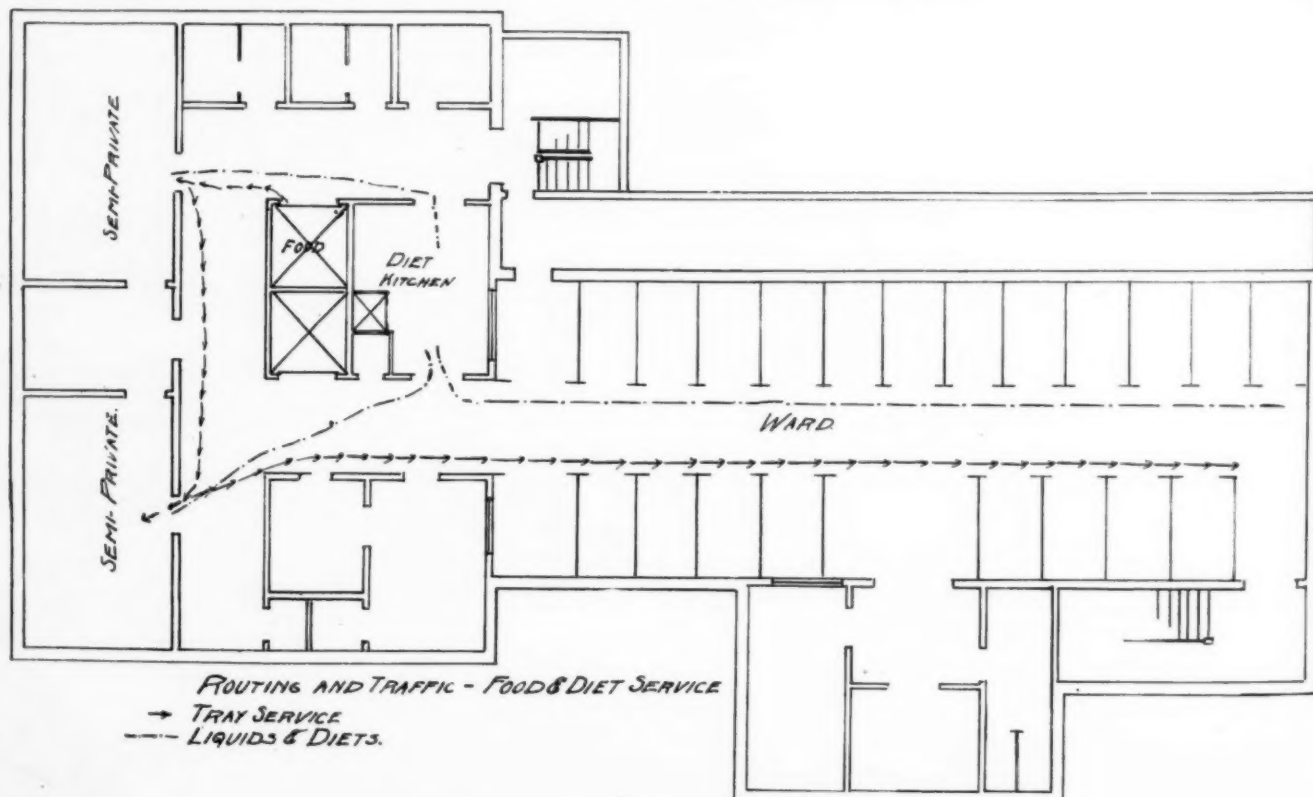
WARD UNIT-EXHIBIT-A-2.

a large amount of time in the aggregate going to other floors of the hospital and often to the nurses' residence for this purpose.

In hospitals where the bed capacity of each floor is large, a special equipment and supply closet is desirable. Much time and effort is consumed by nurses going to the basement for splints, extensions, sandbags and crutches, and to the superintendent of nurses' office for extra rubber rings, hot water bottles, hypodermic syringes and extra needles, not to mention the trips to the operating room for the aspirating set, hypodermoclysis outfit and various

other pieces of sterile equipment. The size and character of the ward unit and the activity of the service will determine the need of this type of closet.

Not only is economy of effort effected by careful and intelligent planning of the nursing units, but in addition, the patients receive constant supervision by means of visual controls. Utility rooms and chart offices should be so placed as to enable the nurse to watch her ward, particularly her very ill patients. During the night there is rarely more than one nurse on duty with from fifteen to twenty-four patients, and at this time it is imperative that



WARD UNIT EXHIBIT-B-2

In the
Ohio State
University
Starling-Loring
Hospital
 Columbus, Ohio . .



Sure Satisfaction

from the Cooking Equipment

EXECUTIVES of hospitals and institutions derive certain satisfaction from the use of Westinghouse electric cooking equipment. They know, and are proud of it, that their kitchens are as modern as the other departments of their plant.

Modern—because the food is cleanly cooked, because the food is full flavored and appetizing, because the cooking cost per meal is satisfyingly low and because the fire and explosion hazards of fuel-operated kitchens are removed.

Is not the idea of full-flavored food, cleanly, economically and safely prepared, of interest to you? We believe that it is and the nearest Westinghouse office will be glad to help you secure your share of the satisfaction resulting from a Westinghouse-equipped kitchen.



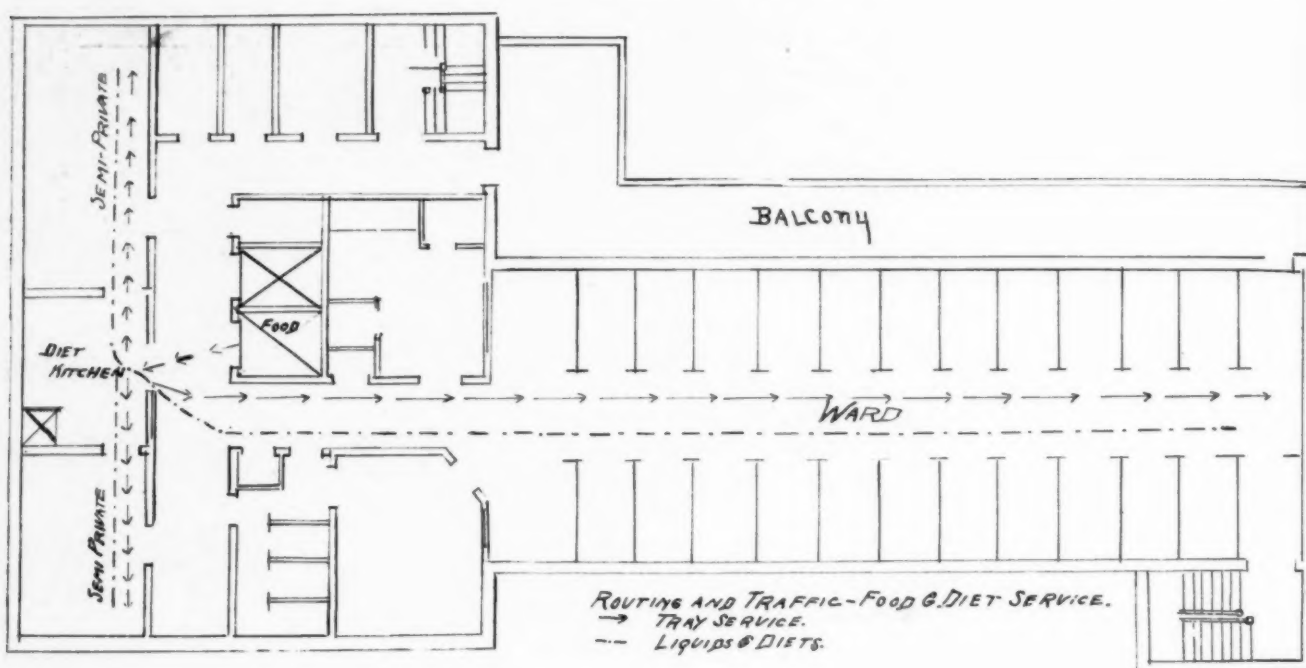
Westinghouse Electric & Manufacturing Company
 Commercial Cooking Section
 Mansfield Works Mansfield, Ohio

Sales Offices in All Principal Cities of
 the United States and Foreign Countries

Westinghouse

X95589

For complete index of advertisements refer to the Classified Directory



WARD UNIT-EXHIBIT-C-2

this means of supervision be provided if the patients are to receive the attention to which they are entitled. Furthermore, it is not fair to the nurse to hold her responsible for the care of so large a number of patients without providing every means of assistance in carrying out careful supervision. When it is necessary for her to go down the corridor to these important service rooms where she is out of sight and hearing of her patients, how can she possibly be held responsible for what may happen in her absence.

This article has presented only one of the phases of hospital operation in which savings may be made through reduction of traffic and routing of work. A carefully considered plan can accomplish the same end in every department of the institution.

No business executive would accept a plan for a factory that would unnecessarily tax the strength of his employees and would demand additional personnel to carry on the routine work. All successful industrial enterprises have found the value of applying efficiency methods and time and labor saving devices in the conduct of their affairs, thereby reducing overhead and adding largely to their profits. Why, then, is it not logical to apply the same methods to the conduct of the institutions that are relying on the community to make up their yearly deficit?

Fitting the Book to the Patient

Elizabeth Reed, hospital librarian, Warren Library, Massachusetts General Hospital, Boston, has the following to say regarding the librarian's work in the hospital:

"There are many cases in which the librarian rather than the patient has to select the books, in much the same manner as the doctor selects his medicine. These instances are definitely therapeutic and here are a few specific examples of them. Patients with exophthalmic goiter, for instance, come into the hospital to have pre-operative treatment to lessen their nervous condition. Since absolute rest and quiet are required, reading of a

peaceful nature is about the only diversion that they are permitted. The selection of books must be carefully made, books that will be interesting, but not too absorbing; diverting, but not too exciting.

"In one case a woman was extremely nervous and irritable in addition to being discontented and homesick. The physician in charge requested us to keep her supplied with books and the nurse told us that they were the only thing that kept her quiet during the three weeks before her operation. She had an average of three books a day, reading fiction, poetry, biography and some travel.

"Of course the nervous suspense of waiting for an operation is even more difficult to endure than actual convalescence and in such cases the hospital librarian is perhaps the most important factor in keeping the spirits buoyant and consequently the body better able to stand the operation. Many times patients remark that they could not have stood the strain of waiting without the books."

Colored Window Panes Aid the Mental Patient

In a recent issue of the *Trained Nurse and Hospital Review*, Rose Bigler, R.N., chief nurse, Peoria State Hospital, Peoria, Ill., writes on color in mental hospitals and its value in controlling behavior.

Miss Bigler points out the many ways in which color may be utilized to arouse the interest of the more dull or stupid patient or to lessen the morbid mental activity of the person with a highstrung nervous temperament. Of especial interest are her remarks on the use of colored window panes: "In some solariums colored window panes have been used in the past, the blue or violet for its soothing effect upon the excited patient; the red or ruby for its stimulating effect upon the depressed patient; opal for its exhilarating and bracing effect; and the chrome or amber for a supposed relaxing or antispasmodic effect. In this last named solarium were placed some epileptics and catatonics."

Custard with Sponge Cake and Figs

6 cups Libby's
Evaporated
Milk
6 cups water
12 eggs
1 cup sugar
1 tsp. salt
1 tsp. nutmeg

Scald Evaporated Milk and water in top of double boiler. Beat eggs slightly, add sugar, salt and nutmeg. Pour into milk, stirring constantly. When custard thickens, remove from fire and chill. Serve in cups lined with lady fingers or sponge cake. Top each cup with whipped cream and preserved fig. (Serves 40)



Creamy custard —tempting and nourishing



A dessert that will please patients with delicate appetites

So important in nearly every case when you want to build strength—to make certain that the patient takes plenty of eggs and milk!

And how difficult this is, when patients are hard to please!

Many dietitians say they have found one dish which has been of great value to them in persuading patients to take eggs and milk. It is a custard that is unusually smooth and creamy. The secret of its goodness lies in the milk that is used—Libby's Evaporated Milk, full of rich nourishment, convenient and economical.



For years many hospitals have been using Libby's Evaporated Milk. Coming from selected dairy herds, it is full cream cow's milk with more than half the natural moisture removed. In every 16 ounces there are $7\frac{1}{2}$ teaspoons of butterfat—equal to a full cup of pure cream!

Libby's Evaporated Milk is just one of Libby's 100 Foods that have found wide acceptance in leading hospitals. Packed right where grown, these foods have the freshness and flavor that build prestige.

To make your trays more appetizing, try some of the Libby Foods listed here. Your jobber can tell you about them.

Libby, McNeill & Libby,
N-7 Welfare Bldg.,
Chicago

*These Libby Foods of finest flavor are
now packed in special sizes
for institutions*

Hawaiian Pineapple
California Asparagus
California Fruits
Spinach
Kraut
Jams
Jellies
Santa Clara Prunes in Syrup
Blackberries
Loganberries
Red Raspberries
Tomato Purée
Pork and Beans
Olives
Pickles
Mustard
Bouillon Cubes
Beef Extract
Chili Sauce
Catchup
Salmon
Evaporated Milk
Mince Meat
Boneless Chicken

DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by LULU G. GRAVES, 7 East 54th Street, New York, MARY A. FOLEY, Director of Dietetics, Kahler Hospital, Rochester Minn. and S. MARGARET GILLAM, University Hospital, Ann Arbor, Mich.

Irradiating Ourselves and Our Food*

By CHARLES SHEARD, Ph.D.,

Section of Physics and Biophysical Research, Mayo Clinic, Rochester, Minn.

IT DOES indeed seem strange that man should need instruction in the art of eating, since he has eaten every day of his some half million years of existence. And just as strange is it that, while man knows that the cattle out in the open spaces of the hills and the plains must toil with the sun's energy stored up in the green grass, he forgets that he, too, is an animal, and that he must toil with the sun's energy, drinking it in directly through his skin so that it may reach the very marrow of his bones.

When, therefore, primitive man wrestled with Nature as did the cattle of the fields, and on bended knee and with exposed body worshipped the sun as the giver of life and health, he lived much closer to Mother Nature than does the ingenious and inventive superman of the present day. As master of all that he surveys, he lets his machinery do the wrestling and toiling for him, clothes himself in much fine raiment, houses himself in poorly ventilated and often overheated and moistureless mansions, loads his table with devitaminized foods and complacently seats himself behind the transparent sands of the window pane which rob him of the health-giving rays of the sunlight.

Man Is a Child of the Sun

While civilization has spelled progress in innumerable ways, and while man has learned to master in considerable part the diseases of contagion, he is today awakening to a realization of the fact that he must consciously utilize the powers of light to combat the diseases of deficiency. So we are being brought rather forcibly to appreciate that man, as of yore, is a creature and a child of the sun, and that he must receive its vitalizing energy, both directly and indirectly, in order that his bony framework may be properly formed and nourished, that his blood streams may carry the requisite building and purging elements and that he may be fed and nourished from the outside in, as well as from the inside out. For many of the present day problems of growth, nutrition and disease are quite largely questions of deficiencies in the accessory food factors—sunlight and vitamins.

As Steenbock and his colleagues at Wisconsin have

pointed out in a recent paper, an opinion has long prevailed among practical stockmen that farm animals require a certain amount of direct sunlight for physiological well-being. Without doubt this feeling had its origin in the observation that stock turned out in the paddock in the springtime, following the close confinement of the winter months, became more contented and improved in appearance as they basked in the sunshine.

How Light Affects Egg Production

Poultrymen, who are always eager to apprehend the elusive factors of egg production and the hatching and rearing of chicks, have been observing the promptness with which chickens seek out the sunlight, how in the sunshine the combs and wattles become redder and the feathers smoother and how egg production increases with the general well-being of the animal.

But in the past the beneficial action of sunlight has been attributed to heat rather than to light. And again, any beneficial action from light, in the absence of a change of ration, has been attributed to the greater opportunity for exercise, with resultant increase in appetite and consumption of food. Likewise, in the field of human medicine there has been a reluctance to ascribe any beneficial biological properties to light. As Steenbock says, "While life at high altitudes has long been adjudged beneficial in certain diseases, such as tuberculosis and rickets, the benefits have long been attributed to the purity of the air, its freedom from dust, its low oxygen content, its stimulating temperature, its low humidity and its content of ozone. Only as the result of the enthusiasm of those interested in heliotherapy has light finally received the recognition that it deserves.

But, in passing, we ought to pause long enough to utter a word of warning against extreme enthusiasm, else we may be carried off at a tangent and go far astray from the truth. There are, without any doubt, diseases of darkness, and there are marked beneficial physiological effects to be derived from the proper administration of radiation from the sun, carbon arcs and quartz lamps rich in ultraviolet rays. But radiant energy will not cure everything from a wooden leg to a wooden hand. And, furthermore, it must be borne in mind that vitamin D, which is synony-

*Address delivered before the Twenty-ninth Annual Convention of the American Hospital Association, Minneapolis, Minn., October 10 to 14, 1927.

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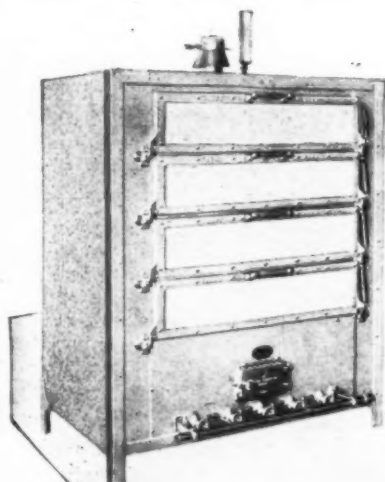
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mous with ultraviolet irradiation in so far as its effects are concerned, is but one of several accessory food factors, and that the possible biological permutations and combinations as to reserves and deficiencies, hyperfunctionings and hypofunctionings of organs and so forth, are myriad. Only by carefully controlled experiments on animals and plants will it be possible to pick out ultimately facts from fiction.

And matters of dosage are just as important in heliotherapy as in x-ray and radium therapy. While natural sunlight or its artificial substitutes are beneficial in tuberculosis, it is now known that its administration must be carefully controlled if untoward conditions are to be avoided. And, as recently pointed out in the *Journal of the American Medical Association*, "ultraviolet rays are not to be regarded merely as a sort of plaything in the hands of untutored persons; nor should they become a tool for quacks."

Effect of Ultraviolet Rays on Food

And that which is true of the use of ultraviolet light in the treatment of diseases of man and other animals, is likewise true of the newly discovered power of ultraviolet rays to confer antirachitic properties on various types of food. For it has been found that undue exposure to ultraviolet rays may actually produce deterioration in foods, so that great caution and expertness must be used to insure the desired beneficial effects.

And again, we know that various types of therapeutic lamps vary in their total emission of ultraviolet light, and that they possess widely different distributions of energy in this portion of the spectrum. Sunlight also varies greatly in its content of ultraviolet light, for the ultraviolet radiation is at a minimum during the winter months and is at a maximum in the northern hemisphere during July and August.

We are still lacking scientific determinations of the minimal amount of the health-giving rays, which lie at the very end of the invisible ultraviolet portion (290 to 320 millimicrons) of sunlight, necessary in order to prevent rickets. Some recent experiments carried on in the winter time in Toronto, Ont., indicate that there is sufficient energy in the ultraviolet portions of the average daily sunlight during the winter months to prevent animals from becoming rachitic when fed a rachitic diet. From these and similar experiments it may be concluded that, even though the energy contained in the antirachitic portion of sunlight is very low in the winter time, a sufficient number of hours of exposure will prevent rickets.

Be Outdoors in Winter

And such experiments as these emphasize the necessity for getting as many hours of the whole of sunlight as possible during the winter months. Our children and ourselves spend as many of our waking hours as possible out of doors in the summer time, when the ultraviolet content of the sunshine is at its height. Our skins drink in the energy of the sun; we tan by reason of the ultraviolet irradiation. Without doubt there is a storage of a portion of this vitalizing solar radiation which carries on through the late fall and early winter days. But February finds most of us beginning to run down physically, subject to common colds and grippe, showing signs of anemia, if perchance we have those tendencies, and manifesting other symptoms of a system functioning below par.

During these fall and the winter months we bundle ourselves in our winter flannels and furs, hardly affording the little health-giving portion of the sunlight that is present a chance to even kiss our cheeks. And we

spend most of our time behind the windowpanes of our homes, schools and offices, which rob us of these highly potent rays. It is estimated that the man who labors all day out of doors receives a thousandfold as much light as one whose duties keep him indoors. And since the glass of our ordinary windows does not transmit much that is vital in the unseen portion of sunlight, it is easy to believe that most of us are robbing ourselves and our children of an important means of possessing and maintaining good health.

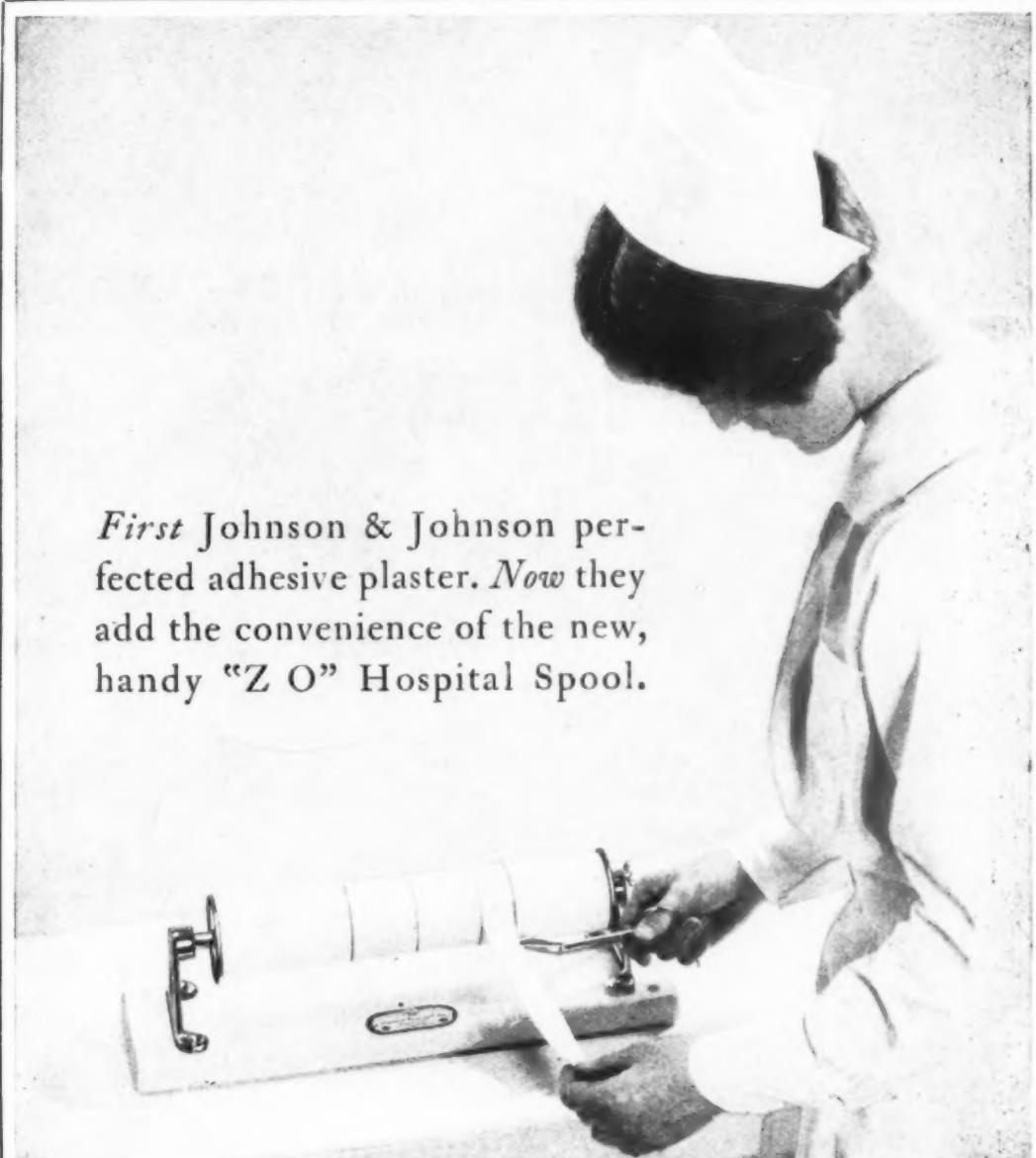
These assertions are not exaggerations, nor are they statements to be highly discounted. There is a wealth of experimental evidence from both the animal and clinical standpoints to substantiate the fundamental value of ultraviolet irradiation in the prevention and cure of certain types of disease, and to demonstrate its rôle in growth and nutrition.

We have proof that the ultraviolet light affects the production, hatchability and fertility of hen's eggs. Steenbock and Hart and their colleagues have shown that irradiation of hens with ultraviolet light results in an abundant egg production, increases the lime in the shell and sustains hatchability at 60 to 70 per cent. The embryos from the eggs of irradiated hens contained nearly twice as much lime as those from nonirradiated hens. The antirachitic power of the yolk of eggs from irradiated hens was ten times as great as from the controls. Groups of hens in midwinter continued laying when given an exposure to ultraviolet light from a quartz-mercury arc lamp for about ten minutes a day. Those not receiving this irradiation decreased their egg production practically to the zero point. Feeding cod-liver oil or irradiating with ultraviolet light again stimulated and increased egg production in these nonproducing hens.

Effect of Irradiation on Hens

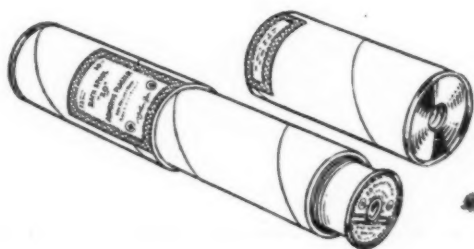
Hughes and others at the Kansas Agricultural College have shown that when the feed is low in antirachitic vitamin, the amount of vitamin in the eggs is dependent upon the amount of ultraviolet light that the hen has received. The hatchability of eggs depends in part upon the amount of antirachitic vitamin contained in them. Hence, whether or not an egg contains vitamin D, the substance that prevents weak legs in chickens and rickets in children, depends upon the kind of life the hen that laid it had led. For if she has led an out-of-door life, or if she has received daily doses of ultraviolet light from the mercury or carbon arcs, she will produce vitamin D eggs. Eggs laid by irradiated hens were fed to other chickens on a rachitic diet and no weak legs developed, whereas eggs laid by hens sheltered behind the panes of ordinary window glass and not receiving the whole of sunlight or ultraviolet light baths were of no value in preventing rickets.

Goldblatt and Soames, as well as Hume of the Lister Institute, have shown that the growth period of rats, when placed on a ration deficient in what was then supposed to be vitamin A only but is now known to be vitamin D, could be prolonged by exposing them to ultraviolet irradiation. In other experiments Hess, Weinstock and Sherman induced rickets in rats by a diet containing too little phosphorus. Then the animals were fed with human milk and afterwards with milk from a woman who had been irradiated by means of a mercury-vapor lamp. A striking difference was noted between the results obtained by the feeding with milk that had been collected before or after irradiation. Healing of the rickets was not brought about by means of the first milk. Quite the reverse was the case with milk from the human subject who had been



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irradiated, for this always produced marked calcification of the ends of the bones. Hart, Steenbock and Elvehjem have shown that ultraviolet energy can influence the storage of calcium and phosphorus. It was found that a mature lactating or dry goat was losing calcium when on a ration deficient in the antirachitic factor (negative calcium balance). When the goat was exposed for twenty minutes daily to the radiation from a mercury-quartz lamp, the negative calcium balance was converted into a definite positive one, and the inorganic phosphorus of the blood was also appreciably increased. Henderson has demonstrated that irradiation has some effect on the metabolism of calcium and phosphorus. By submitting a pig, fed on a poorly balanced diet ($P_2O_5:Ca:Hg = 3:1:1$), to one hour's irradiation daily with a carbon arc, he demonstrated a definite increase in the retention of calcium and phosphorus.

It is remarkable that both cod-liver oil and certain forms of radiant energy should have such marked influence on the calcium and phosphorus balances. For neither cod-liver oil nor ultraviolet light supplies the required calcium or phosphorus. Without supplying either of these substances, radiant energy or the potent element of cod-liver oil causes an animal, kept in a state of calcium or phosphorus starvation, to operate as if the requisite quantity of these substances was present. Ultraviolet light or cod-liver oil must provide something that causes the organism to operate with increased metabolic efficiency and regulates the assimilation and conservation of calcium.

Cod-Liver Oil Is Effective

It is possible that both cod-liver oil and ultraviolet rays are effective because of their ability to promote absorption from the intestine. According to Shipley, Park and their co-workers, when treatment with either ultraviolet light or cod-liver oil is instituted, although no change is made in the calcium or phosphorus of the diet, absorption of these elements from the intestine takes place more readily. Their concentration in the blood rises until the deposition of calcium phosphate in the bones becomes possible. Ultraviolet rays cannot penetrate to the living membranes of the alimentary tract; hence one has to assume that physical and chemical changes are produced in the blood by reason of the absorption of such rays by the skin. As a result of these alterations, greater absorption of calcium and phosphorus from the intestine is possible.

These views are supported by Orr, Holt, Wilkins and Boone, who reported experiments showing that infants with active rickets fail to retain calcium and phosphorus, although an adequate amount is present in the diet. Irradiation with ultraviolet light causes large amounts of these elements to be retained in the body. Increased amounts of calcium and phosphorus are found in the urine after ultraviolet irradiation, indicating increased absorption from the intestine.

Experimentation, therefore, with ultraviolet rays on animals illustrates the close relationship between light and diet in the causation of rickets, and shows that the chemical changes induced by such radiation produce beneficial results. When the diet remains a constant, standard, rickets-producing ration, rickets will either develop or not, according to the dosage of light. It has been found that irradiating for two minutes daily with the quartz-mercury-vapor lamp, at a distance of three feet, afforded protection. There can be little doubt but that the same reciprocal relationship between light and diet prevails in regard to infantile rickets.

In this connection it is interesting to note that Huld-schinsky in 1919 placed on record the statement that at

the Oscar-Helene Home for curing crippled children, artificial ultraviolet irradiation was more effectual than sunlight and cod-liver oil. He suggested that every child, whether it shows any signs of rickets or not, should be exposed for at least a month during its first year to ultraviolet rays. If this were done there are prospects of seeing rickets disappear entirely.

The body needs calcium and phosphorus, not only for bone building, but also for many other functions. Each must be present in minimum amounts and should exist in a definite proportion; roughly, ten milligrams of calcium and four milligrams of phosphorus for each 100 cubic centimeters of serum, and a product of approximately forty. Disturbance of this balance upsets many functions, as for example, the action of the nervous system. Potassium and sodium increase the irritability of the nervous system; calcium decreases the irritability. Consequently, if calcium is deficient in the blood of a baby, a certain hypersensitivity, called tetany, results, which is manifested in convulsions.

Therapeutic Changes Effectuated

Without going into further detail we may sum up the therapeutic changes that clinical and laboratory data indicate may be brought about by the use of ultraviolet rays. Ultraviolet light (1) destroys bacteria, both by direct and indirect methods, (2) increases the bactericidal properties of the blood, (3) increases the percentage of hemoglobin, as well as increases the number of blood cells, (4) increases the calcium, phosphorus, iron and iodine content and number of blood-platelets, (5) increases the supply of blood to the peripheral parts of the body, (6) accelerates elimination, (7) is an aid in maintaining normal metabolism, and (8) favorably influences both the endocrine glands and the nervous system.

The mass of evidence accumulated during the last ten years as to the marked effects of sunshine, cod-liver oil and ultraviolet light in promoting normal growth and nutrition and, if you please, in the treatment of health, which is the keeping of health and the prevention of disease, naturally led to investigations on the transformation of inert substances to active, antirachitic agents through irradiation. In brief review, we may state that the experiments of Huld-schinsky in 1919 demonstrated conclusively that light is a specific curative agent for rachitis. In 1921 Shipley, McCollum and their co-workers showed definitely that cod-liver oil is a remedial agency of marked efficiency. Hume, and also Goldblatt and Soames, in 1922, made the interesting observation that the growth period of rats, when placed on a diet supposedly deficient in vitamin A only, could be prolonged by exposing them to ultraviolet light. Later Goldblatt and Soames showed that livers taken from rats which had been exposed to such radiations were able to induce growth when fed to other rats, whereas livers taken from nonirradiated rats were inactive.

In 1924 and 1925, Steenbock and his colleagues at Wisconsin instituted experiments in which rats were used to test the comparative amounts of vitamin A and the antirachitic factor in butter fat and cod-liver oil. Both irradiated and nonirradiated animals were used. In some cases the introduction of irradiated rats into the cages of the nonirradiated rats seemed to indicate that the nonirradiated rats started to grow. This suggested that irradiated animals were able to carry over in some fashion some beneficial effect to the others and that, possibly, secondary radiations from such irradiated animals were present as the active agent.

The contention of Hume and Smith that air itself could

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be made stimulating to growth by exposure to ultraviolet rays might possibly have supplied a suggestive clue had not the work of other investigators here and abroad definitely proved that it was impossible to activate air. Hence it was concluded that the irradiated animals stimulated growth in the nonirradiated ones indirectly and not directly by secondary irradiation. Apparently, then, the excreta and possibly the skin secretions of these animals become activated and these, if consumed by others, might supply the antirachitic factor in their deficient diet. The experimental work of those who maintained that feeding livers from irradiated animals stimulated growth, suggested the possibility that light either synthesized the antirachitic factor or else brought about its translocation from other organs.

With these data as a starting point, Steenbock and his co-workers attacked the problem of irradiating foods. Omitting the details of their work, they found that, by exposing such food materials as wheat, rolled oats, corn, hominy, cream of wheat, shredded wheat biscuits, corn flakes, cornstarch, meat, milk and egg yolk, to ultraviolet light, these food materials could be endowed with properties preventing rickets. This indicated that if such an effect could be produced in a variety of foods it must be the lipoidal constituents, of the nature of sterols, which can be endowed with this activation. Cholesterol, as obtained from the brain substance and present in cod-liver oil, is entirely inactive but after exposure to ultraviolet light it becomes antirachitic in properties. Since fats are excellent solvents for lipoids, practically all fresh fats, including butter, olive oil and lard, can be activated, often to such a degree as to be comparable with cod-liver oil.

Plants Little Influenced by Rays

And it would appear that cod-liver oil owes its antirachitic properties to solar radiation, in that the cod fish, either directly or indirectly, take in as part of their food plankton that have been directly exposed to the sunlight. So that, in the ultimate analysis, the efficacy of cod-liver oil comes from the sunshine.

Since, however, plant materials can be produced only in the presence of light, by so-called photosynthetic or photochemical processes, it seems as though the activating antirachitic principle should be generously distributed in foods eaten by man and beast. The explanation for its absence lies in the fact that the ultraviolet portion of light is the activating region and that there is but little effect or action in sunlight except at its extreme ultraviolet end. By virtue of the fact that the solar radiation that reaches the earth is relatively poor in ultraviolet rays and, again, that such rays have little penetrating power, we have reason to believe that plants, which possess no system for the transportation of lipoids, cannot be affected to a high degree.

The names of Hess and Weinstock will be associated for all time with experimental work upon the ability of ultraviolet rays to impart antirachitic properties to inert substances. Without any question, the honors must be divided between Hess and Steenbock and their collaborators. In 1924 and 1925, Hess and Weinstock published reports showing that phytosterol from cotton seed oil and cholesterol from brain tissue, irradiated for thirty minutes in a 1 per cent suspension in water, protected against rickets when fed to rats on a diet deficient in phosphorus. With reference to the bearing of their experimental results on the pathogenesis of rickets, they propose the following hypothesis: "As is well known, the epidermal portion of the skin contains a large amount of cholesterol in its deeper layers, in close approximation to the prickle

cells. It would seem quite possible that the cholesterol in the skin is normally activated by ultraviolet radiation and rendered antirachitic and that certain portions of the solar rays and artificial radiations are able to bring about this conversion. This point of view regards the superficial skin as an organ that reacts to particular light waves rather than serves merely as a protective covering. The suggested mechanism presupposes not only the formation of active cholesterol within the skin but its further transport by way of the circulation."

In recent experiments, Hess showed that young rats, placed on a standard low phosphorus rickets-producing diet, did not develop rickets upon the addition of irradiated calf or cadaver skin to their diet, as opposed to those animals fed with untreated skin.

What Spectral Absorption Tests Showed

Hess and Weinstock strengthened their contention by means of spectral absorption tests on cholesterol exposed to ultraviolet radiation. The activated cholesterol absorbs less ultraviolet light than does ordinary cholesterol, an effect that is intensified with increasing degrees of irradiation. Such changes in absorption spectra indicate that definite chemical changes (either the formation of new compounds or activated forms of old compounds) are taking place.

It was later shown that the unsaponifiable fraction of cotton seed oil irradiated with ultraviolet light protected rats against rickets, while the saponifiable fraction was inert. A series of tests with filters to select the desired part of the spectrum showed that the radiations that render cholesterol active biologically are similar in their wave lengths to those that have been found to afford protection to animals against rickets when they are directly exposed to the rays. It was also found that, if the irradiation of the skin is too prolonged, a substance is finally formed that has no antirachitic properties. The time necessary for the activation of cholesterol is from one-half hour to three hours.

The activity imparted by ultraviolet irradiation to inactive oils is a stable property. Irradiated olive oil kept in a stoppered bottle in the dark has been found by Steenbock and Daniels to keep its potency for at least eight months.

The antirachitic properties of hays are related to their exposure to sunlight. Inactive hay may be made active by irradiation, say Steenbock and Hart. These investigators have shown that the antirachitic properties of cow's milk were increased more than eight times by irradiation; the activity of goat's milk was increased twenty-four times. Similar effects can be induced by the irradiation of the whole animal.

Danger in Milk Irradiation

Drummond of England has sounded a note of warning with regard to the danger of irradiation of milk. Milk exposed for five minutes to ultraviolet irradiation becomes unpleasant and unpalatable and suffers chemical changes that are highly undesirable from the nutritive standpoint. One of these changes is the destruction of vitamin A by oxidation. Children treated for rickets with irradiated milk would receive, therefore, an inadequate supply of vitamin A, which would result in retarded growth and lowered resistance. The suggestion is made that it would be better to use vegetable oils, which contain little vitamin A but possess high antirachitic potentiality. According to Drummond, the more important problem is that of feeding dairy herds in such a manner as to show a high vitamin value throughout the year.



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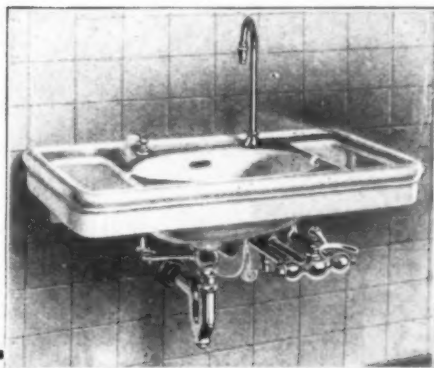
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As a closing illustration, I am citing the clinical investigations of Györy of Germany on the treatment of rickets with irradiated milk powder. Some twenty cases were considered; periodic tests on the calcium and phosphorus in the serum were made, as well as x-ray examinations. The treatment appears to be successful. The irradiated milk powder retained its antirachitic properties for at least four months.

Ergosterol

The latest chapter in the story of the irradiation of food has been contributed by Rosenheim and Webster, of the National Institute for Medical Research, London. These English workers, as well as Hess of America and Windaus of Germany, believe that only a small portion of the cholesterol is activated by ultraviolet rays. To this active substance Rosenheim and Webster have quite appropriately given the name ergosterol, the working sterol. This compound is widely distributed in lower plant forms and only very minute quantities are needed to protect experimental animals from rickets.

"It (ergosterol) was found," says Hess recently, "to bring about a healing process of the bones when even as little as 0.0003 milligram per capita daily was given. In tests in which irradiated cholesterol is fed, it has been found that approximately one milligram is needed to initiate healing."

Recent studies by Knudson of the Albany Medical College on the antirachitic activation of substances by cathode rays indicate that cholesterol exposed to cathode rays for thirty seconds is effective in bringing about healing of rickets in doses of one or two milligrams per day. Yeast, which contains ergosterol, considered to be the provitamin of vitamin D, is rendered very potent by exposure to cathode rays. With an exposure of thirty seconds, a dose of one milligram daily brings about advanced healing of rickets within two weeks. Compared with a good grade of cod-liver oil, this is at least ten to twenty times more potent.

Antirachitic Properties

The newly discovered power of ultraviolet rays, and presumably also cathode rays, to confer antirachitic properties on various types of food is so astounding that the scientific world has hardly yet recovered from its surprise. For, as a recent writer in the *Journal of the American Medical Association* says, "The possibility of making a few milligrams of an isolated organic substance acquire, through exposure to suitable brief irradiation, an antirachitic potency equivalent to that of an entire quart of good cod-liver oil fires the imagination and inspires an increased respect for the importance of 'little things' in nutrition." Chief among these little potent things are the vitamins. And, as we said at the beginning of the essay, man is beginning to utilize the powers of light consciously, as distinct from his unconscious enjoyment of them.

For millions of years the sun's rays have been impelling forces; they have taken the lifeless atoms of carbon, calcium and iron and made of them the living realities. Life is a dynamic relationship between structure and environment. If there are environmental deficiencies there will be diseases of deficiency. And so as our knowledge of the physical qualities of radiant energy increases and its biological action becomes better understood, we may expect that there will "emerge a science useful in the knowledge of medicine as an implement in the eternal vigilance and use against human disease," and that this energy will be employed in the treatment of health, which is the keeping of health and the prevention of disease.

Patients in Hospitals for Mental Disease

The U. S. Department of Commerce has made a preliminary report of the results of the census of state and federal hospitals for mental disease in 1926. Complete returns from thirty states, covering 105 hospitals, showed 36,936 first admissions in 1926, as compared with 34,362 in 1922, an increase of 7.5 per cent. The number of first admissions has increased only a little more rapidly than the general population, from 46.8 per 100,000 in 1922 to 47.3 in 1926.

The number of patients in the hospitals at a given date is a good indication of the extent to which public provision has been made for the treatment of mental patients. In the thirty states covered by the report the number of mental patients increased steadily from 156,454 or 218.5 per 100,000 of the general population on January 1, 1922, to 178,353 or 226.9 on January 1, 1927.

A large increase in the number of first admissions to hospitals in the different states does not necessarily mean a great increase of mental disease in those states. Such an increase often represents an expansion of the capacities of the hospitals and improvement in the machinery for bringing mental cases under the care of the hospitals. New Hampshire and the District of Columbia had the highest rate of first admissions in 1926, 82.6 and 121.4 per 100,000 respectively. In 1922 the rates were 68.5 for New Hampshire and 188.9 for District of Columbia. Pennsylvania, South Dakota, Michigan and Georgia had the lowest rates, 21.8, 29.2, 29.9 and 30.4 respectively. These figures are an increase from 16.9, 25.5 and 21.9 for Pennsylvania, South Dakota and Georgia in 1922. Michigan's rate decreased from 31.5 in 1922.

The District of Columbia, New York and New Hampshire had the highest rates per 100,000 of general population of patients present in state hospitals on January 1, 1927. These rates were 810.1, 383.1 and 343.6 respectively. Pennsylvania's rate of 125.3 was the lowest of the thirty states.—Dept. of Commerce Press Summary, *Census of Institutions*, 1926, Sept. 26, 1927.

Handling Radium in the Hospital

In a talk recently given by Dr. A. James Larkin, Chicago, the following interesting statements were made with regard to the administration of radium in a hospital:

"Radium applications are best made in the hospital because the exposures are frequently too long for office administration, because constant trained supervision is at hand, transference from patient to patient is facilitated, and the loss of radium is less frequent. Hospitals containing 200 or more beds are justified in owning their own radium provided that a large proportion of the cases seen by the staff of such hospitals employ the radium in their treatment. Fifty milligrams may serve as a practical unit supplemented by ten milligrams of flat applicators for skin lesions.

"In administering the radium supply of a hospital some trained member of the staff may be put in charge whose duties shall be: Consultation with the physician attending the case, making applications or delegating their application, selection of cases, providing a suitable repository for the radium, making available schedules of its use, supervising case histories as to dosage, accuracy of application, and follow-up records and making available monographs, literature, and collected data on radium."

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will take care of your elevators in every detail. Other forms of Otis-Service can also be obtained when Full Maintenance is not required.

ASK OUR NEAREST OFFICE

OTIS ELEVATOR COMPANY

OFFICES IN ALL PRINCIPAL CITIES OF THE WORLD

OUT-PATIENT SERVICE

Conducted by MICHAEL M. DAVIS, Ph.D., Executive Secretary, Committee on Dispensary Development, United Hospital Fund of New York, 151 Fifth Avenue, New York
A. K. HAYWOOD, M.D., Superintendent, Montreal General Hospital, Montreal, Que.

How the Shoemaker Clinic is Serving Cincinnati's Negro Quarter*

"WITH 1,823 patients making 5,377 visits to the clinic, and the case service department serving 808 families, comprising 3,491 persons, we can feel that the first year's work of the Shoemaker Clinic has proved it obviously more than an experiment," says James H. Robinson, executive secretary, Negro Civic Welfare Association, in writing of the Shoemaker Health and Welfare Center. "Indeed, it is a remarkable record of service."

The Shoemaker Clinic completed a year's work on April 1, 1927. This organization is a distinct innovation in its field, in that it deals almost entirely with a clientele of colored patients and includes on its clinic staff in equal numbers colored and white physicians, recruited from the general medical profession of the city.

Seven white physicians and eleven colored physicians serve in the various clinics. The colored physicians rotate, each serving four-month periods. There are two colored dentists in the dental clinic. The others on the staff are the registrar, two full-time nurses, a part-time nurse and a dental assistant who also works in the office.

Patients are admitted regardless of their residence or length of stay in the city. Ten cents is charged for each visit with an additional ten cent charge for medicine. "This fee collection," the report states, "since it is not compulsory, works no general hardship, and tends to preserve a feeling of self-respect among individuals who might otherwise object to the acceptance of charity. An earnest effort is made to weed out persons able to pay for treatment by private physicians."

Clinic sessions have been held regularly in general medicine and the following specialties: surgery, pediatrics, prenatal care, dentistry and venereal disease. There have been five sessions weekly in the general medical clinic and these have been satisfactorily attended. There were not, however, among these patients as many cases of tuberculosis or suspected tuberculosis as the high death rate from this disease in this section of the city indicated that there should have been. To reach the cases not coming to the clinic, the Anti-Tuberculosis League co-operated by bringing in tuberculosis suspects for examination. The league also organized a West End Colored Women's Health Club with 1200 members, who were advised to go either to the Shoemaker or to the health department clinics for physical examinations. To aid in carrying on this work a tuberculosis specialist was appointed to the clinic staff.

The prenatal and pediatric clinics hold active sessions.

Mothers have come regularly to the former clinic from its opening day. Many of their babies are now being taken care of in the pediatric clinic, which has been even more popular, and the excellent physical condition of these babies is sure proof of the value of the service rendered their mothers earlier.

The dental clinic, because of the number of patients, was limited at first to adults. With the addition of the dentist's assistant to the staff it became possible to handle more patients, and children are now sent there regularly from certain schools in the district which otherwise would have no dental service available for the colored pupils.

The fact that the health center is in a region where conditions are conducive to the spread of venereal dis-



Shoemaker Health and Welfare Center, Cincinnati

*Condensed from "This West End Problem," the first annual report of the center, August, 1927.

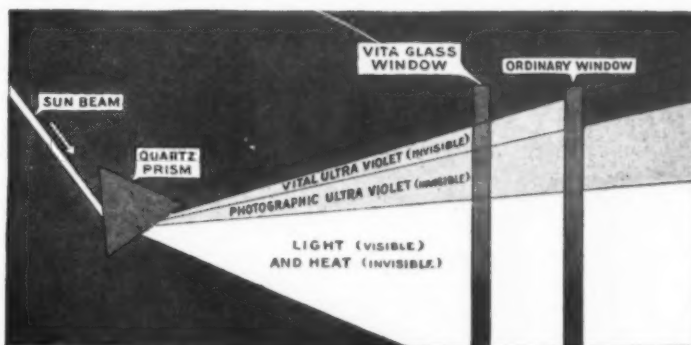
Already over 100 hospitals have installed Vita Glass and are enthusiastic over the way it speeds up convalescence.



How to make your windows

Avenues of Health

Through windows of Vita Glass you can now bring inside your hospital the vital ultra-violet light rays considered by medical authorities so necessary in combating diseases and restoring health.



NOW every patient in your hospital can enjoy the healing, health-giving rays of the sun which ordinary window glass has always filtered out and kept outside. The discovery of a remarkable new window glass, called Vita Glass, makes this possible.

Vita Glass looks like ordinary glass. It has all the properties of such glass. But it admits more light than ordinary glass. And—most important of all—it permits the passage indoors of the life-giving ultra-violet light rays.

Vita Glass the glass of life

These rays are known technically as the rays in the sun's spectrum between 2900 and 3200 Angstrom Units. They are the rays that tan—those deemed so necessary by modern medical science for building up general good health and resistance to sickness and disease.

Specifically, Vita Glass transmits the short, invisible rays of daylight (to be found in sunshine, cloudshine or skyshine) which increase the hemoglobin content in the blood; assist in the prevention and hasten the cure of rickets, tuberculosis and other diseases; destroy bacteria; stimulate the growth of strong bones and bodies; assist in the cure of skin diseases; and aid in convalescence.

Simpler treatment—inexpensive

Thus has ended the search of years for an inexpensive window glass for the hospital that would bring inside its

walls the main source of life and health and energy. In Vita Glass you have a simpler way than by lamp treatment to give the vital ultra-violet ray dosages for tuberculosis, rickets and glandular affections.

Ever since the discovery of Vita Glass in England by the eminent scientist, Prof. F. E. Lamplough of Trinity College, Cambridge, its efficiency to perform the work claimed for it has been under constant test. Successful tests have been conducted here by the Council on Physical Therapy of the American Medical Association, the Bureau of Standards in Washington, D. C., and by eminent physicists and scientists. Vita Glass today is in use in over a hundred hospitals and sanatoria scattered all over the country.

Vita Glass in two forms

Vita Glass can be used in your hospital wherever ordinary window glass is now used. It costs a little more than ordinary glass, but it is handled and installed in exactly the same way as ordinary window glass. And it is much less expensive than costly fused quartz panes, the first glass made for this purpose. Vita Glass comes in two forms: *Clear Vita Glass* permits unobstructed vision to the same extent as ordinary window glass.

A few of the many hospitals using Vita Glass

Columbia-Presbyterian Medical Center, N.Y.C.
St. Luke's Hospital, Cleveland, Ohio
Children's Hospital, Detroit, Mich.
Desert Sanatorium, Tucson, Ariz.

Diagram showing how Vita Glass pane transmits the invisible, health-giving ultra-violet rays.

Cathedral and *Rolled Sheet* types are for use wherever obstructed vision is desired—in sunbath porches, for example. Both may be glazed to any size suitable to thickness. Each piece of Vita Glass is sold under the guarantee that it will transmit the vital ultra-violet rays of daylight to the extreme limit of the sun's spectrum. Each piece is identified by a trademark label and etched with the name Vita, as your assurance of its genuineness.

We will gladly send you on request more complete information about this health-bringing glass, including reports of tests made of the results of using Vita Glass over various forms of animal and vegetable life.

Address your inquiry to Dept. L. 1, Vitaglass Corporation, 50 East 42d Street, New York City.



VITA GLASS

Each pane is cut to size, etched with the name Vita and bears the trademark label

ease is responsible for the increasing size of the venereal disease clinic. This stands third in total number of visits. Obviously, attendance at this particular clinic can be lowered only when the problem is attacked at its source and conditions in that district have improved.

The case service department of the Shoemaker Center, under Mrs. Laura V. Cuni, cooperates by referring indigent patients to the clinic, and at present a program is outlined whereby some 900 families under their supervision will be sent during the coming year for general physical examination.

The Babies Milk Fund Association assists the clinic in its service to sick children and expectant mothers. This association recommends physicians from its staff, who are employed in the pediatric and prenatal clinics. In turn the nursing staff of the clinic cooperates in following up cases discharged from the general hospital and referred by the Babies Milk Fund groups.

Where cases are found to be tuberculous, health department nurses assist in following up and hospitalizing such individuals. They also make an earnest effort to bring in for medical examination all the contacts of such patients. The laboratories of the city health department make tests needed for the establishment of definite diagnosis. The Cincinnati General Hospital, Cincinnati, cooperates by providing such vitally necessary features as the x-ray.

The clinic also cooperates with the work certificate office of the Public Schools Vocation Bureau. Children referred by the bureau are given dental and physical examinations and reports are made on these children, covering their physical condition and working capacity.

All sick patients who need a home visit from a physician are referred by the clinic to the district physicians of the health department.

The handicap bureau of the Associated Charities refers cases to the clinic for examination and treatment.

How the Clinic Began

This record shows how the social agencies of Cincinnati are attempting to solve the serious social problem caused by the recent large increase in the negro population of the West End, an already congested and backward section of the city. The Community Chest, the Negro Civic Welfare Federation, the Associated Charities, the Better Housing League and many other civic and social agencies in the city had recognized their inability to cope individually with conditions there. While they were considering ways and means, Mrs. Michael M. Shoemaker presented her fine old family homestead, centrally located in the West End, to the Community Chest and the Council of Social Agencies for use as a health and welfare center.

This building was in its day one of the most handsome mansions in the city. Stone steps guarded by two dogs carved in stone lead up to the entrance. A stately hall with tile floors, some parts of which have been duplicated in the White House, an imposing stairway in carved mahogany, spacious rooms with seventeen-foot ceilings, an oak library with tiers of bookcases reaching to the ceiling, paneled woodwork handsomely designed, and carved marble mantels are some of its appointments. It cost the Community Chest some \$10,000 to turn it into a house of health and social welfare. This was in addition to substantial gifts for this purpose received from Max Senior, Mr. and Mrs. Charles Kuhn and Leonard Minster.

The Public Health Federation, working jointly with the Negro Civic Welfare Federation, formulated a specific program and requested a budget of \$15,000 to launch a

clinic to take care of the sick in the West End neighborhood and to promote health. They also recommended the appointment of negro as well as white physicians, dentists and nurses to the staff. Previous to this time negro doctors and dentists had had no opportunity for clinic service.

This budget was earnestly recommended by the executive secretary of the Community Chest and was passed, although doing so meant the possibility of cuts in the budgets of the other agencies. They, however, were interested enough in seeing the work go forward to be willing to accept this contingency.

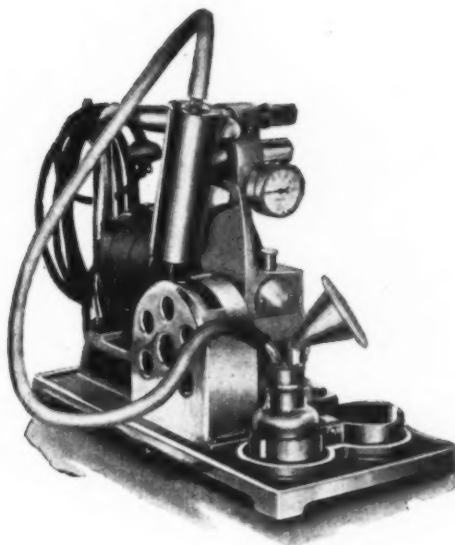
Welfare and Family Service Work

The opening of the Shoemaker Center made it possible for all the social agencies working within the district to join in a cooperative effort. The Associated Charities and the Better Housing League combined their negro field workers into a single staff. The responsibility for the general family case work was assumed by the Associated Charities, and the Better Housing League supervises the housing work. The other agencies actively engaged are: the American Red Cross, Children's Home, Ohio Humane Society, Juvenile Court, Central Clinic, Department of Public Welfare, Bureau of Catholic Charities, Salvation Army and Board of Education. The agencies agreed to refer their functions in the district, so far as is feasible, to the Shoemaker Center staff. The agencies in return were to supply regular consultative supervision. This plan makes possible an approach to any problem from the point of view of the specialized agency, and at the same time avoids duplication of visits, safeguards the privacy of the family, and eliminates the danger of treatment being given without consideration of the family's best interests.

In addition to the family case work done, a housing survey was made. Every house in the area was inspected by the field staff and the facts recorded. As a result the efforts of the city housing bureau to improve housing conditions were renewed with increased vigor and nearly 150 tenements were condemned. The workers at Shoemaker help families that must move from condemned houses into better quarters, to secure good tenants for landlords who have remodeled and repaired their houses, and impress the tenants with the fact that they must try to do their share in keeping up standards in houses where the orders have been fulfilled. As a help to the teaching of housekeeping, a housekeeping center was established on the third floor of the center. Three rooms, economically and attractively furnished, serve as living room, bedroom, dining room and kitchen. Classes held there teach the women some of the simple principles of home making, which includes planning and preparation of meals, and instruction in dressmaking and in the home care of the sick.

Through the cooperation of the volunteer department of the Associated Charities a group of thirty-two negro women from all parts of the city was organized to assist in establishing this much needed work for the colored people of the West End district. Valuable aid was given by them during rush seasons, such as Negro Health Week, Clean-Up Campaign, Community Chest Drive, holiday seasons and the housing survey. These women gave 593 hours of service or the equivalent of three months of service for one person.

It has proved a tremendous advantage to the family service department to have the clinic in the same building with this department. This has given the opportunity for an immediate medical opinion, thus bringing to the visitor



To All Users, Dealers and Prospective Buyers of the Perfection Breast Pump

WE have been makers of milk extraction appliances since 1913. We own numerous United States and foreign patents covering this class of appliances.

There are about 30,000 Perfection machines for the extraction of milk in use all over the world.

The construction of the pump used in our breast pump is disclosed in and covered by our United States patent No. 1,072,584 issued September 9, 1913.

The Perfection Breast Pump was, as early as 1918, inspected by prominent doctors and nurses and successfully used in hospitals.

In the development of the Perfection Breast Pump every little detail so necessary to make it a success has been carefully worked out in accordance with the principles and teachings of our patents and with the benefit of our many years of experience in the manufacture of milk extracting appliances.

We have also had the benefit of many valuable suggestions given us by doctors, nurses and hospital superintendents.

We pride ourselves on the fact that we were the first to put on the market a highly successful electric breast pump fully equipped with:

1. Valveless pump with simplified vacuum control,
2. Carrying handle for easy portability,
3. Stationary vacuum gauge,
4. Electric switch in base of pump,
5. Hooks on handle for electric cord,
6. Enclosed crank shaft for protection, and
7. Bottle receptacles in base for convenience.

Some of our competitors have followed and not only copied some of our mechanical features but have also altered the appearance of their machine to more closely resemble ours.

Our patents on appliances for the extraction of milk are too numerous to list here, but of course we will protect our patents and other rights and will prosecute infringements.

Ask us to send you a list of hospitals that are using the Perfection Breast Pump.

We shall be glad to send a Perfection Electric Breast Pump to any hospital on approval for ten days.

PERFECTION MANUFACTURING CO.
2191 East Hennepin Ave. Minneapolis, Minn.
Sold by leading hospital supply dealers in U. S. A. Sole Canadian
Agents, The J. F. Hartz Co., Ltd., Toronto and Montreal

PERFECTION ELECTRIC BREAST PUMP

at the beginning of her work with the family a definite knowledge of what she could expect of her client from the physical point of view, and of any physical handicaps or limitations. During the year 270 medical examinations were made in the clinic for clients of the family welfare department. There are many possibilities of improving social service for clinic patients through cooperation with the family service department. This remains to be worked out.

"In general," the clinic section of the report concludes, "it may be said that the Shoemaker Clinic has fulfilled the expectations of its organizers and sponsors. . . . If the initial year is to be taken as an indication, an increase in attendance can be expected during the year 1927, which will tax our facilities to the limit. . . . The necessity for additional accommodation and space will probably soon become a factor for serious consideration. However, with the organization functioning as smoothly as it is at present, with the continued assistance of health agencies of Cincinnati, and with the backing and financial assistance of the Community Chest and kindly benefactors, no fear is felt that the future of the clinic is anything but an assured success."

The Kahn Test and the Wassermann Test

If any scientific diagnostic procedure is well established it is the Wassermann test for the detection of one of the most widely disseminated venereal diseases, says Dr. Morris Fishbein, editor, *Journal of the American Medical Association*, Chicago, in a recent article in the *Scientific American*. So firmly has this procedure been established that almost any one can name the disease for which the test is used and its significance. It, therefore, becomes especially difficult to displace this procedure with any newer method, even admitting special qualifications for any such revised technique.

However, Dr. R. L. Kahn, of the Michigan State Department of Health devised some years ago a precipitation test which has been gaining ground steadily in this country.

A recent report records the results in 300,000 cases of which more than 175,000 had been directly compared with Wassermann tests. These revealed the fact that the Kahn test is more sensitive than the Wassermann test both for the blood and for the spinal fluid. The advantages of the Kahn test are the use of cheaper material, and the lack of necessity for incubating the material over night. Thus the results of the tests may be determined within a period of a few minutes.

How O. T. Department Is Administered at Bellevue Hospital

Writing on occupational therapy problems in a general hospital in *Occupational Therapy and Rehabilitation*, Mary C. Merritt, Bellevue Hospital, New York, names the following general regulations which guide the administration of the occupational therapy department at Bellevue Hospital:

- "1. We do not have any money dealings with patients.
- "2. We use the same prescription card, which meets our particular needs, all over the hospital.
- "3. Each aid writes her supply needs in a common

order book and prices her own finished articles, she being furnished with the cost of her supplies.

"4. Close contact is kept with social service and rehabilitation bureaus.

"5. We have access to patients' charts.

"6. Volunteer workers are used to prepare work for us.

"7. It is the policy of the department to give the patient one half of the finished products. In the psychopathic wards we have found this inadvisable as it hurries and excites the short term mental cases, so they are given to understand the work is there to help them pass away the time. On the other hand, we do insist rather strongly that children make something for us. We think the fifty-fifty idea a good principle with children."

The Intern's Laboratory Service

The laboratory intern service should be focussed upon the interpretation of results. Allied to this and inseparable from the informative and intelligent clinical utilization of the laboratory, attention should be paid to the intelligent selection of the laboratory examinations to be made. So says Dr. Robert A. Kilduffe, director of laboratories, Atlantic City Hospital, Atlantic City, N. J., in an article recently published in the *Journal of the Medical Society of New Jersey*.

Dr. Kilduffe goes on to say that it must be remembered that in practice laboratory examinations must be paid for either by the physician who employs a technician in his office, or by the patient who is referred to the pathologist. The patient expects, and has a right to expect, that these procedures for which he has paid, are necessary and of essential importance in the recognition or management of his condition and would be sadly surprised—if not entirely disgusted—to learn half of them were of no conceivable value, furnished no information, and had no possible relation to or connection with his disease.

The resident physician should be taught how to select, from the multiplicity of laboratory procedure available, those that might or should prove of use in the case at hand. Not only does he benefit thereby but the laboratory also benefits during the rest of his career, by the elimination of senseless examinations requested solely because the equipment is at hand or in the silent hope that some of the tests may offer a diagnostic lead.

Decision on Reinstatement of Student Nurse

In the case of Beatty v. Binghamton City Hospital (L30 N. Y. Misc. 181) Justice Rhodes of the Supreme Court of New York on July 29, 1927, denied an application for a peremptory mandamus order to compel the Binghamton City Hospital, Binghamton, N. Y., to reinstate the petitioner as a student nurse in the nurses' training school conducted by that hospital. "Inasmuch as the governing board of the hospital had jurisdiction of the petitioner and in their discretion dismissed her after an investigation and upon finding that she was incompetent, petitioner is not entitled to a peremptory mandamus order reinstating her as a student. It was not necessary that the petitioner be given a notice of charges preferred or of a hearing thereon."



The Battle Creek Super Solar Arc Lamp

For Heat, Light and Ultra-violet Therapy

THE new Battle Creek Super Solar Arc Lamp is unique in the field of Phototherapy appliances. It is the result of our own 40 years' experience as pioneers in the production of therapeutic arc lamps in this country.

Many advanced features of construction make the new Battle Creek Super Solar Arc Lamp noteworthy. A snap of the switch starts the arc burning at full power. No time is lost in waiting for the rays to attain adequate intensity. The lamp being automatically adjusted by magnetic feed, the largest arc possible with the given current is always maintained.

A specially constructed adapter is furnished with the lamp. It is designed so that the arc does not heat the applicators. Any standard quartz applicator may be attached.

By giving off rays in both the infra-red and ultra-violet the Super Solar Arc may be used to successfully treat a wide range of diseases. The technic of handling it is easily mastered. Various spectra are instantly obtainable by the use of different carbons.

We have recently prepared a new bulletin which describes fully the many advantages of the new Super Solar Arc Lamp. May we send you a copy?

Sanitarium & Hospital Equipment Co.
Battle Creek Michigan

Battle Creek Therapeutic Appliances Include:

Hydrotherapy Apparatus— Type G-3

The Battle Creek Hydrotherapy Apparatus is constructed throughout of high quality brass. The appliance has wall type control and gives jet, rain or shower, perineal, needle, spray and Scotch douches.

Electric Light Bath Cabinets

Three models, varying in size and cost. Each cabinet complete with special comfort chair and necessary bulbs. Made of the finest hard wood water-proof cemented veneer.

The Battle Creek Radiant Baker

A tested appliance for heat application. The Baker is constructed of aluminum and asbestos, and equipped with safety rheostat to prevent excessive heating.

The Battle Creek Treat- ment Photophore

A most efficient appliance for making local applications of heat. It combines the essentials of many expensive therapeutic lamps in one simple effective appliance.

HOSPITAL EQUIPMENT AND OPERATION

With Special Reference to Laundry, Kitchen and
Housekeeping Problems

Conducted by C. W. MUNGER, M.D., Director,
Grasslands Hospital, Valhalla, N. Y.

Solving the Maintenance Problem

By E. E. SANDERS

Superintendent, Ravenswood Hospital, Chicago

THE maintenance problem in the hospital field is one that often tries the patience of the most cool and reserved of men. I find that the more knowledge a superintendent has of the mechanical equipment and lay-out of his hospital the fewer his maintenance troubles will be. To be sure, there should always be a chief engineer or maintenance man who is capable of handling most of the problems and doing the actual work of repairing equipment, but many times he will need the counsel and advice of a higher authority, and if this authority is fairly well informed then the problem can be worked out to better advantage.

There are of course many things that enter into the maintenance problem, and these I shall touch upon briefly as follows:

Boiler Room Should Be Large and Airy

I believe in a large, well lighted, airy boiler room such as our hospital possesses. It is built on the plan employed in modern industrial plants. There is ample room for the two 100 horse-power boilers and for all other machinery, and there is plenty of space to move around them. We can burn any kind of coal, as draft comes from a brick stack 125 feet high, with an inside diameter of eight feet. In Chicago, however, there being a smoke ordinance, we use Pocahontas mine run coal, so that we are sure not to violate the ordinance.

There should of course be reasonable coal storage space to provide for emergencies, and this should be closed off from the boiler room, with easy access, in order to keep the boiler room as clean as possible. The size of this storage space must depend upon the coal consumption. We can store about fifty tons of coal.

I am not an authority on mechanical stokers. We have investigated them somewhat and there may be some advantage in their use. In our case I do not see that we could save any labor, as our two engineers do all the boiler firing, take care of the ice and refrigerating machinery, and do all other work in the boiler room, on twelve-hour shifts, alternating between day and night shifts every two weeks, our chief engineer taking the day

turn on each shift. These men would not do any other work, so we should not make any saving there. In so far as mechanical stokers permit the use of a cheaper grade of coal and so bring about an ultimate saving in fuel cost, there may be some ground for their use, and I should not be surprised if we gave them a trial some time in the future.

Recording instruments are useful if one wants to maintain a given pressure on boilers or other equipment and to check up on those who are responsible for the result it is desired to obtain.

Much careful thought and supervision should be given in every case to the installation of piping. I am a firm believer in pipes of sufficient size to meet all needs. The location of pipes is important, particularly in their relation one to the other. The utmost care should be taken to see that joints are well leaded and tight and that no defective pipe or fittings are used. There should be plenty of control valves in convenient places so that steam, water, or gas can be shut off for repairs with the least possible inconvenience. In two years' time we have had to cut three holes in our pipe stacks to take out and repair defective steam piping, and always, of course, these defects occur in the places that are most difficult to reach. Fortunately in our case there were control valves so placed that these repairs affected little of our steam service. In other cases I have found it necessary to put in valves, where they were not provided by the architect. In one place where we found it necessary to repair pipes there was such a mass of pipe that it was an extremely difficult job to get at the pipe we wanted. This certainly shows faulty engineering.

Pipes Should Be Accessible

Every pipe ought to be where it can be reached conveniently, and should be so placed that a wrench can be applied at any place. Steam pipes should be covered properly to prevent loss of heat, and cold water pipes should be covered also to prevent sweating. Leaks in pipes of any kind should have immediate attention. Where pipes are exposed, they should be painted to preserve the



*for
exquisite feel*

JUST TOUCH THE SMOOTH, LUXURIOUS texture of a Pequot sheet! How gratefully soothing it is—an invitation to relax and slip into restful sleep!

Imagine the clean, smooth expanse of such sheets on *your* beds. In the exquisite weave of these Pequots, your guests will sense a refinement of the comfort which distinguishes your whole institution.

Pequot "feel" is an ultimate attainment of painstaking manufacture. From the selection of the long, strong cotton fibre itself, to the exacting inspection of the finished sheets and pillow cases, each process must contribute to the uniformly fine, even, long-wearing luxury of a Pequot.

Careful buyers usually end by *standardizing* on Pequots, because they are so uniformly luxurious and economical.

Made by the Naumkeag Steam Cotton Company, Salem, Mass. Parker, Wilder & Co., New York and Boston, Selling Agents.



For complete index of advertisements refer to the Classified Directory



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for Hospital Use

Pathe offers Motion Picture Programs for both entertainment and instruction. They include features, comedies, travel pictures, exploration, sports, current events, and many other subjects suitable for showing to hospital staffs, in the nurses' homes, and to convalescents. The progress made by motion pictures in the educational field is reflected in our arrangement with Harvard University for the preparation of a series of pictures especially adapted to instructional purposes. There are so many films of both instructional and entertainment value for Hospitals and Public Health Institutions, it is essential that we know exactly what type of picture or Program you are interested in before making definite suggestions. Write for full information. There is no obligation.

Educational Department
PATHE EXCHANGE, INC.
 35 WEST 45TH ST., NEW YORK



[When writing, address the Division of Visual Aids]

Gentlemen: Please send me full information on the Pathe Purpose Programs. I am interested in a Program of motion pictures for the Purpose of.....

Name.....
 Address.....

exterior. One of the hardest problems to control is leaky valves, particularly in the hot water lines, and as long as the human element enters into this question, I suppose there will be leaky valves. Of course this problem arises because employees will not take the pains to close the faucets tight, and soon the valve seat is worn so that it will not function properly. I do not think anything but the spring valve will stop this trouble, but this type of valve has its drawback in inconvenience to the nurse and others who wish to keep the valve open at times, so it is about a fifty-fifty proposition.

Duplicate Boiler Feed Pumps Desirable

Duplicate boiler feed pumps and duplicate house tank pumps should be installed to insure continuous operation. Our house tank is electrically operated, by a large ball in the water and counterweight outside which trip an electric switch when the water in the tank goes below or above a certain level. This switch sets the water pumps in motion in the boiler room or shuts them off as the case may be. All our machinery is run by electric motors. Refrigerating and ice making machinery should be watched carefully, and we make it a point to allow the compressors to rest a few hours each day. All machinery should be kept in good condition, well oiled and in good repair. It should be well protected with paint to prevent rust.

Ash removal is one of the things we do not worry about. All the cinders or ashes from our boilers are dumped alongside our power house and they are gladly taken away by building contractors without any expense to us.

In the first two years' occupancy of our new building we had a great deal of trouble with our passenger elevator, although it is considered to be the best make. We finally made a contract with the manufacturer for complete maintenance and since then we have had little trouble. Our elevator is operated by hand lever or by electric push button. We employ operators from 7 a.m. to 9 p.m., after which time the elevator is switched over to the push button control. The manufacturer sends a man to inspect the elevator every week and all repairs needed are promptly made, for which we pay a stipulated sum each month. While this may cost us a little more in the long run, we know that the elevator is going to be kept in good condition and this arrangement has taken considerable worry off our minds thus far.

Make Repairs Promptly

Dumb-waiters are another source of frequent annoyance, yet they are an indispensable adjunct. We have only one but should have two. It is electrically operated and we have been greatly inconvenienced at times when it would not run. I think there should be a duplicate unit so that a hospital will not be caught short if one fails to work. When the central service is used of course more than one is needed anyway. The mechanical parts of this equipment must have the constant attention of the chief engineer or maintenance man.

The solving of the maintenance problem when it is summed up, is to keep the whole plant always in good condition. When defects appear have them given immediate attention. When walls show soil, wash them, or paint them if necessary. When the buildings need repair, make them promptly. A dollar will go farther when spent for prompt repairs than if equipment is left to deteriorate and has to be replaced, and the plant will be much more presentable to the public.



The Greatest Tile Cleaner

MIDLAND TILEOLEUM

the Lightning Cleanser

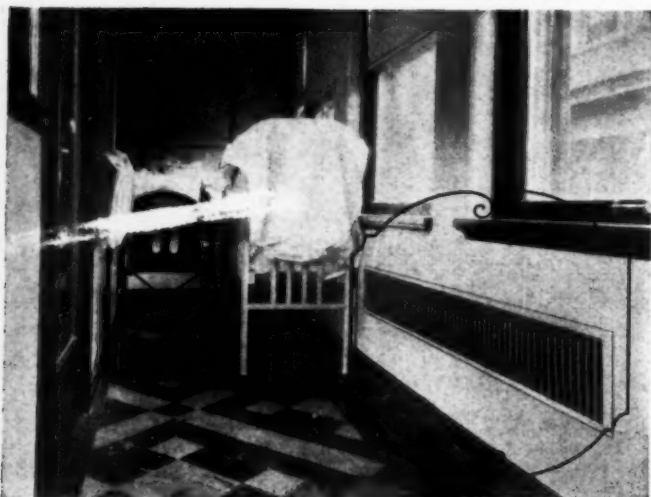
FOR tile, marble and terrazzo cleaning, MIDLAND TILEOLEUM, the Lightning Cleanser, is proving itself to be more efficient and economical than any other cleaner on the market. It is being demonstrated and sold in hospitals, institutions, public buildings and schools the country over. MIDLAND TILEOLEUM, the Lightning Cleanser, will keep tile, marble and terrazzo bright and sparkling. It seeks out and removes the deeply imbedded dirt and grit and restores the appearance of newness to the most badly stained floors. Upon request we will gladly arrange for a demonstration of MIDLAND TILEOLEUM, the Lightning Cleanser. No obligation whatever.

Sales representatives are located in all principal cities. An inquiry to the home office will put you in immediate touch with the one nearest you, or, order direct from

Midland

CHEMICAL LABORATORIES ~ INC.

DUBUQUE, IOWA, U. S. A.

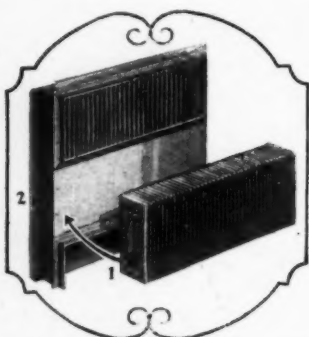


Incubator room—Woman's Hospital—Cleveland, Ohio, showing how extra space was utilized by installing the Herman Nelson Invisible Radiator.

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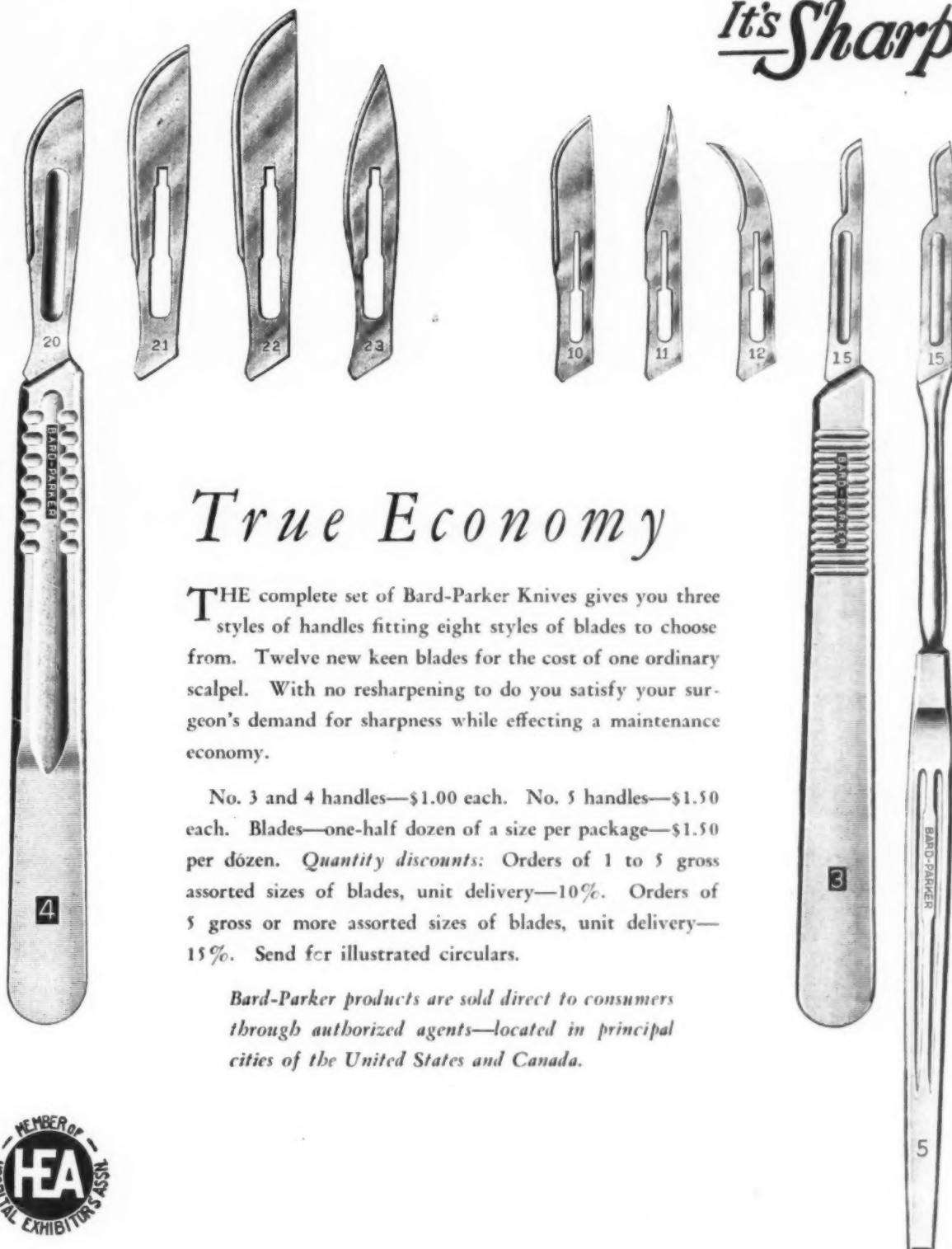
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use there is no excuse for lateness or for standing around on account of being too early. These clocks save time for everyone and encourage promptness.

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In the caring for instruments, first put them in cold water, then have them scrubbed in hot water and soap, next have them boiled for twenty minutes. Then a small quantity of cheap oil should be poured over the instruments and they should be wiped while they are hot. This gives the best care to instruments and keeps them well oiled.

How to Arrest Damage Caused by Clothes Moths

By Lloyd E. Jackson and Helen E. Wassell

Mellon Institute of Industrial Research, University of
Pittsburgh, Pittsburgh

Two billion dollars is the conservative estimate of authorities as the annual damage in the United States caused by injurious insects. Millions of dollars of this loss may be attributed to the clothes moth. Furthermore, the indications are that the damage done by clothes moths is becoming greater each year because the insects are increasing in number.

Many methods for controlling the pest have been proposed. Clothes moths so readily adapt themselves to their food, however, that their voracious appetite is not curbed by any of a large variety of chemicals, dyes, drugs or other adulterants that may be incorporated with it. The effectiveness of the methods adopted ranges from nil to fairly good. Most of these methods depend upon malodorous substances or materials poisonous to human beings as well as to the pests.

Dry cleaners are continually called upon to destroy clothes moths in many different kinds of articles of furniture and clothing. Because the need of more adequate control methods was recognized, the Mundatechnical Society of America, a group of the largest and most progressive dry cleaners in the United States, commissioned their fellowship in Mellon Institute of Industrial Research, University of Pittsburgh, Pittsburgh, to study the problem of developing more practicable methods for controlling these insects. Experimental work was started in 1922.

Investigation has shown that related products derived from cinchona bark fulfill not only the clothes moth repelling requirements of the dry cleaner and dyer but those of other industries as well. The study has been extended with the idea of making the products applicable for use in homes, stores, warehouses and factories where materials are exposed to clothes moth attack.

The investigational plan was guided by definite criteria of excellence decided upon and adopted before the work was started. Mindful of objections to moth repellents that had been recommended, the criteria of excellence for the moth repellent that was to be developed were defined as follows: (1) it must be inodorous; (2) it must adhere evenly to the fiber treated, like a dyestuff; (3) it must be unrecognizable on the fiber; (4) it must not dust off; (5) it must not affect adversely the physical properties of the textile fibers; (6) it must be soluble in inexpensive organic solvents, such as petroleum naphtha, as well as in water; (7) it must have no untoward physiological action, that is, it must be nontoxic to human beings; (8)

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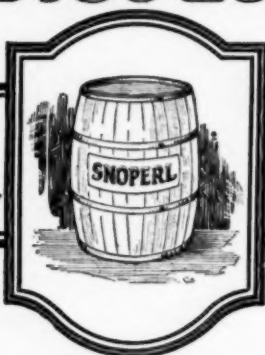
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it must repel clothes moths; (9) its cost must be reasonable from the industrial viewpoint.

Upon undertaking to develop such a moth repellent there was found to be little information regarding the toxicology of various chemicals on clothes moths. Reports were located regarding such substances as Martius' yellow dyestuff (sodium, calcium or ammonium salt of dinitronaphthol) which have been claimed to have moth repellent properties, because it has been noted that materials dyed with the dyestuff or mixtures of dyestuffs containing it were immune from moth attack. Certain fluorids, salts of hydrogen fluosilicic acid, as well as other acids and their salts, were reported in patents on protecting wool from clothes moths.

In the course of the investigation these and related materials were tried. Organic compounds similar to Martius' yellow were prepared and used in experiments. A whole series of bitter substances, intestinal irritants, germicidal and antiseptic substances, local anesthetics and astringents were experimented with. No substance having one of these physiological effects was found to be an effective moth repellent. However, certain products of cinchona bark were ascertained to be excellent repellents. The properties of these substances are a combination of many of the properties that formed the basis for choosing the various groups of substances for study. They are: (1) salt-forming organic chemicals; (2) bitter substances; (3) intestinal irritants; (4) germicides and antiseptics; and (5) astringents. Some of their derivatives are also local anesthetics. Products of cinchona bark are known for their specific action on malarial parasites and as antipyretics.

Products Are Soluble in Water

It happens that the products of cinchona bark that were found to be moth repellents can be prepared so as to be soluble in water or in any of the organic solvents. This property is an exceedingly important one for several reasons.

First, when applying a mothproofing solution on wool, for example, by spraying, the solvent or vehicle for carrying the repellent must be one that readily wets and penetrates the fiber. Certain organic solvents excel in this property, while water, on the other hand, has poor penetrational properties. Water sprayed on wool stands out in little droplets on the surface of the fibers.

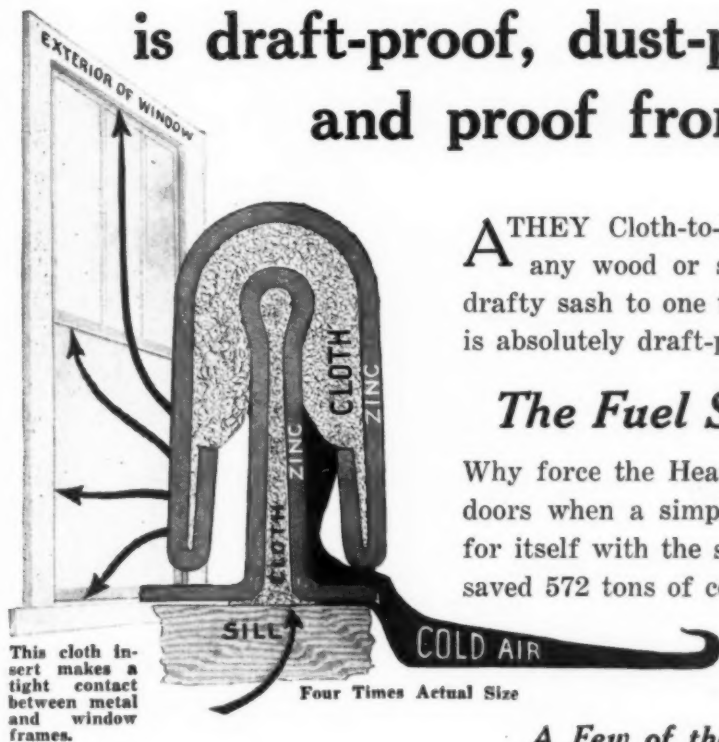
Second, it is often desirable to choose the solvent or vehicle for carrying the moth repellent into the material treated in order not to affect adversely certain of its physical properties. For example, it is not practicable to treat with water or with certain organic fluids. Furthermore, some fluids that can be used satisfactorily on undyed materials would be unsuitable for dyed material because of their effect on the dyestuff.

Since the discovery of the moth-repelling properties of the products of cinchona bark, they have been subjected to rigid laboratory and practical tests. Mothproofing service based upon the products has been offered in the plants of members of the Mundatechnical Society for the past two years. The equivalent of several hundred thousand pounds of wool, in the form of garments, upholstered furniture, rugs, fur coats and other house furnishings, have been treated.

The Mundatechnical Society of America has obtained patent protection on the process in the United States and either has been allowed or has pending the same protection in the other important countries of the world. The society is now considering plans for making the moth repellent available to other industries and also in households.

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Notre Dame Hospital ... Montreal, Canada

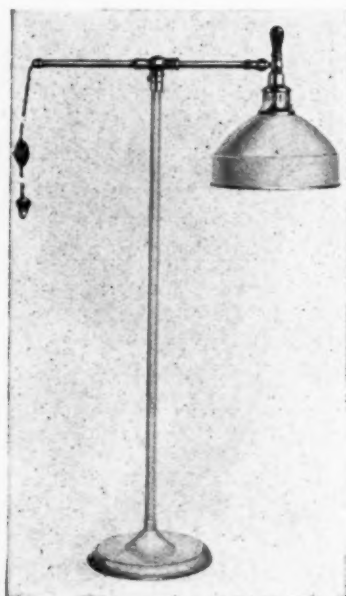
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These three points have been carried out. Each syringe is equipped with a device that securely holds the needle



by half a turn to the right, but at the same time releases the needle very easily by half a turn to the left.

The finger rest is practically stationary and prevents rolling, and the clips on the finger rest prevent the piston from slipping forward or falling out.

The finger rest also can be swung outward and the plunger fastened to it, thereby preventing the annoyance of getting the plungers of different syringes confused.

How to Clean Steel Knives

All tarnishing of steel knives can be avoided if the knives are cleaned immediately after use. The chemical action of the acids which causes tarnishing requires a certain time to accomplish its purpose, and the sooner it is interrupted the better it is for the future use of the knife.

Steel knives should not be left uncleared overnight. The blade should be carefully rinsed in hot water after use and wiped dry with a clean cloth. This will destroy the acids. If there is time, polish the blade with a fine powder polish. The polish upon the blade of a good steel knife is produced by very rapid friction, which makes the surface of the blade absolutely smooth until it shines as does the polish on furniture or glass. Acids destroy the smoothness of the surface and eat not only into the polish, but create small indentures in which food will decompose and help to make the tarnishing of the blade permanent.

Many machines and appliances for polishing knives are sold, but a good substitute for these is an ordinary bottle cork and some fine polishing powder. No appliance can replace the sensitiveness of the hand, and a few rubbings with the cork will not only remove all the uncleanness from the blade, but also renew the polish which is its natural protector. Before polishing rinse the blade thoroughly with warm water and dry it. After polishing, a renewed rinsing and careful drying will remove the remains of the polishing powder.



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After an unsuccessful attempt to raise the needed funds in their own way, they sent for us. We made a careful study of the situation and advised an outright gift campaign among their members which were scattered over nine counties in Northwestern Pennsylvania—and only about seven hundred in Erie where the hospital is located.

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Alberta Hospitals Association Holds Profitable Conference

(Continued from page 116)

particularly the lack of alternating current in the rural regions. He stated that it was difficult to obtain alternating current for the larger machines, the portable and smaller units being carried on direct current. This was followed by a paper from Dr. George H. Malcolmson, radiologist, Royal Alexandra Hospital, Edmonton, which brought out many aspects of the use of the x-ray and the need for and importance of careful technique and interpretations. He suggested that the x-ray, particularly through the fluoroscope, could be used more for the teaching of nurses than it has been in the past.

The last paper of the afternoon session of the first day was given by J. Barnes, Calgary General Hospital, Calgary, who discussed the practical side of a laundry's operation, bringing out many points of management and procedure that promote efficiency and economy in laundry work. In the general discussion and round table that followed the question was raised as to whether it is more economical for small hospitals to do their own laundry or send it out. The consensus of opinion was that it is more advantageous to do the laundry in the hospital, not only from the standpoint of service but from that of satisfaction and saving of the linen.

Every Hospital Should Select Its Staff

The sessions of the first day ended by a general discussion of various problems arising out of the papers presented. Probably the most important subject was the right of a hospital to select its staff. It was the general opinion of the conference that every hospital has the right to select the members of its staff, and that all doctors privileged to practice are not entitled to the privileges of the hospital without being properly accredited and accepted by the board of management.

A large public meeting was held in the evening, which was addressed by Dr. M. R. Bow, deputy minister, Department of Public Health, in which he outlined many salient points connected with the health and hospitals of the province. Dr. Bow mentioned particularly the low operative mortality throughout the province—1.5 per cent, and the low general death rate, which is about eight per thousand. Jean S. Wilson, executive secretary, Canadian Nurses' Association, Winnipeg, followed with an address in which she outlined the work of the Canadian Nurses' Association, showing the progress made in nursing during the past few years through the efforts of the association.

The second day consisted of a joint session of nurses, hospital executives and health officers. F. Welsh, Royal Alexandra Hospital, Edmonton, opened the session with a splendid presentation on the adequate housing of the nursing staff, emphasizing particularly the need for modern nurses' homes, individual rooms, refinements and appointments for the comfort and happiness of the student nurse. When increasing hospital accommodation, she said, attention should be given to the need for increased nursing accommodation.

Dr. Maurice Busby, Central Alberta Sanatorium, Calgary, gave an interesting talk on the treatment of tuberculosis. He mentioned the large number of unreliable treatments that were deceiving to the patient, and outlined the methods known to be effective.

A. T. Stephenson, Red Deer, gave a practical paper on "Financing of Small Hospitals," pointing out many of the difficulties. This was followed by an address by

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Jean Wilson, executive secretary, Canadian Nurses' Association, in which she outlined the most advantageous way of staffing a small hospital, and stated the minimum requirements for training schools. She emphasized the importance of good nursing service and proper training of the nurses.

The session was brought to a close with general discussion and a round table conference conducted by Dr. MacEachern, the discussion centering chiefly around whether or not all hospitals should require their nurses to take training in psychopathic and tuberculosis nursing. There appeared to be considerable difference of opinion as to whether or not these two subjects should be added to the present curriculum. Many spoke in favor of it and some against it. Probably the greatest objection was raised on account of the already crowded nursing curriculum. It was decided to have a joint committee from the Nurses and Hospitals Association bring in a report on the subject at the next meeting. The convention then retired to the Macdonald Hotel where a joint luncheon with the Board of Trade was held, at which Dr. MacEachern gave an illustrated address on the inner workings of the hospital systems of New Zealand and Australia.

The afternoon session opened with a paper by Dr. T. H. Whitelaw, medical health officer, Edmonton, in which he emphasized the part the public hospital should play in preventive medicine. There are many diseases, apart from infectious diseases, which the hospital and health department could cooperate in eradicating. Much yet remains to be done in reducing the death rate from heart disease, kidney disease, cancer, tuberculosis, high blood pressure and pneumonia.

How Traveling Clinic Functions

Dr. R. T. Washburn, University Hospital, Edmonton, gave an excellent review of the work of the traveling clinic, with which he had been associated in the province during the year. This traveling clinic, completely equipped to give physical examinations and perform minor operations—particularly tonsillectomies, and dentistry—spent several months traveling in the outlying districts, doing a splendid work in communities where medical service was difficult to obtain. In addition to the actual work done, an educational campaign was conducted. The clinic practically paid its own way by making a moderate charge for the services rendered. Dr. Washburn, who directed the clinic, was able to get a good cross-section view of the medical and hospital problems of the province.

Dr. David Low, superintendent, Regina General Hospital, Regina, gave an interesting talk on the financing of hospitals in Saskatchewan, referring particularly to the municipal system, where many hospital districts are supported by taxation.

Probably one of the most interesting papers of the entire session was that given by Mrs. L. de Satge, Holy Cross Hospital, Calgary, who brought out clearly the need for postgraduate courses in nursing and hospital administration in the Province of Alberta.

The last paper of the afternoon session was given by Dr. J. M. MacEachern, professor of philosophy, University of Alberta, who outlined in a comprehensive manner the philosophy and psychology of the entire problem of hospital and nursing work. The meeting was brought to a close by a round table conference and general discussion conducted by Dr. MacEachern, which dwelt at length on the question of establishing postgraduate courses for nurses and courses for hospital executives in connection with the University of Alberta. Probably out of this discussion an institute for this purpose will be developed.

Things your patients take on faith

HOSPITALS have won a tremendous victory over human prejudice within the last generation.

It was only a few years ago that a sick person looked on a hospital as the beginning of the end, with little hope for those who entered. The thought of "going to the hospital" filled the average person with horror. How different it is today, when the civilized world looks on the hospital with a faith and hope that is almost religious!

The faith with which a patient is committed to your care is based on complete confidence in your knowledge and skill. Your patients trust you with their health and life—an inspiring trust!

You trust us, in many cases, for the organotherapeutic materials you use. To us that trust is an inspiration as great as the patients' trust in you. For a third of a century we have striven, employing every practicable scientific safeguard, to command the confidence of the medical profession in our products.

We are today generally recognized as "Headquarters of medical supplies of animal origin!" That is the expression of a practical ideal for us, which we make every human effort to maintain. You may have complete confidence in our ligatures or pituitary liquid or any other organotherapeutic product bearing our name!

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Chicago





Illustrated is No. 1009; equipped with loose spring-filled cushions over spring-edge sub-construction; reclining back and disappearing leg-rest; genuine leather cover in a wide selection of colors.

For cases of broken limbs where every movement is a pain, the Royal Easy Chair saves the patient hundreds of painful minutes and the attendant many tiring steps.

The Ideal Chair for Convalescents

The Patient can change his position without getting up and without the aid of a nurse.

The Royal Easy is a wonderfully comfortable chair in which the patient can, by merely pulling the concealed ring, recline the back to any position desired. The hidden leg-rest can be pulled out and so adjusted that the patient is completely relaxed. To sit up again, the patient just pulls the ring and the back returns to an upright position. The Royal Easy takes up no more room than any other fine hospital chair.

Royal Easy Chairs are built by master chair craftsmen. Only the highest quality materials are used. Royal Easy Chairs are unconditionally guaranteed.

Take advantage of this special offer:

Because we feel so sure that this chair is the most important development in convalescent equipment in years, we are offering to hospitals and other institutions one genuine Royal Easy Chair at the quantity price. You only have to buy one and you save the quantity discount. The coupon below will bring you catalog and complete information about this special offer.

Pull the Ring **Royal** Back Reclines
EASY-CHAIRS
STURGIS MICHIGAN

Royal Easy Chair Company, Sturgis, Michigan.

Gentlemen:

Please mail prices and leather samples in Spanish Red ☐; Spanish Brown ☐; Spanish Taupe ☐; Spanish Green ☐; Black ☐; for use on your No. 1009 Royal Easy Convalescent Chair, as I may take advantage of your special offer.

Name of Individual _____

Name of Institution _____

Address _____

City _____

State _____

Training of Dietitians to Be Standardized

The American Dietetic Association has approved an outline of a standard course for student dietitians in hospitals. Hospitals offering this approved course will be listed in the April *Journal of The American Dietetic Association*.

The outline is a skeleton of the minimum requirements that should be included in the hospital training of student dietitians. Much more is undoubtedly given in many institutions, but unfortunately there are hospitals whose custom has been "to take student dietitians" and to use them for routine work, with no thought of any responsibility for the student's educational experience. The general adoption of this standard outline should do away with such practice.

Students who have satisfactorily completed the course will be given a certificate. This should prove helpful to the superintendent considering applicants for a position as dietitian in his hospital. He will know that the applicant with the certificate has been given definite training and experience in preparation for her work. At present in most cases he can only guess at what that preparation has been.

The American Dietetic Association fully realizes that this outline is only a beginning. It is not necessarily the best training for a dietitian but it seems to include the essential points. From time to time it will of course be necessary to revise the outline of the course.

The dietitian or superintendent of any hospital offering a course to student dietitians should compare their outline with this standard course in order to be sure that they are including all essential phases of the work. If they wish to have their hospital listed with the institutions offering the approved course, they should write at once to the office of the American Dietetic Association, 25 East Washington Street, Chicago.

Anyone interested in obtaining a copy of this outline may do so by writing to the office of the American Dietetic Association.

Lectures Being Given At Mental Hospital

The twenty-eighth annual course of clinical lectures is now being carried on in the pathological laboratory of the Central Indiana Hospital for Insane, Indianapolis, according to the *Indiana Bulletin of Charities and Correction*. The laboratory, with its amphitheater and an abundance of material for research has excellent facilities for teaching the diagnosis, treatment and management of mental and nervous diseases. The clinical files of the hospital are available for teaching purposes. They contain the records of more than 5,000 cases based on the classifications recently adopted by the American Psychiatric Association and the National Committee for Mental Hygiene.

There are being conducted courses of psychopathology, psychiatry and neurology and social psychiatry, in co-operation with Indiana University, and a course in abnormal psychology for students of Indiana, DePauw and Butler Universities and Central Normal College. There is to be given later a course of clinical lectures for members of the legal profession and students of Indiana University and Benjamin Harrison Law Schools.

Economy comes into the hospital-kitchen

with this
**delicious
dessert**



JELL-O is a favorite dessert in hospitals throughout the country. For it is served not only to patients, but to everyone in the hospital. And so economically! The institutional package makes one gallon of Jell-O—enough to serve from 40 to 50 persons, at a cost of little more than one cent per serving.

There are countless ways of serving Jell-O. It can be combined with cream, fruits and vegetables to make a wide variety of desserts and salads. Or it can be served plain, for Jell-O is always delicious, with wonderful flavors of fresh, ripe fruits.

Both time and trouble are saved in the kitchen when Jell-O is on the menu. It can be prepared quickly and easily, and is sure to turn out right—sparkling clear and appetizing enough to tempt any sick-room appetite.



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Dietitians recommend Jell-O in almost all cases. It is a light food, requiring very little digestive effort. In addition, Jell-O supplies energy and makes a supplementary protein contribution to the body.

The ingredients used in Jell-O are of highest quality, and when buying insist on the genuine Jell-O. There is only one by that name.

Upon request, we will gladly send you a set of Jell-O recipes prepared especially for institutional use.

THE JELL-O COMPANY, INC.

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JELL-O

Trademark Reg. U. S. Pat. Off.

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be
A Happy
and
Prosperous One

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COMPANY

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Soaps, Disinfectants and
Janitors' Supplies

*the World's
Best*

DETEX

*A type
for every
purpose*

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DETEX WATCHCLOCK CORPORATION

BOSTON-23 BEACH ST.

CHICAGO-4147 RAVENSWOOD AVE. ♦ NEW YORK-76 VARICK ST.

Institute of Medical Research
Given to Christ Hospital

James N. Gamble, philanthropist of Cincinnati, has given an institute of medical research to Christ Hospital, Cincinnati. Mr. Gamble has previously given many hundreds of thousands of dollars to Christ Hospital. His present gift includes the necessary floor space, furnishings and laboratory equipment, and ample endowment to carry on scientific research.

Announcement of the gift was made in the presence of 1,200 campaign workers at a victory dinner closing a successful campaign in which \$2,400,000 was raised for a new hospital building of 285 beds, and a new nurses' home of 275 beds for Christ Hospital.

The letter written by Mr. Gamble states: "In deep appreciation and gratitude toward the citizens of Cincinnati for the loyal and splendid support which these men and women of my native city have given to Christ Hospital by their generous contributions to the building program and thus made it possible to extend its usefulness, I should like to add a complete floor, covering about 12,000 square feet, to the present plan of eight stories, which shall be used as an institute of medical research, with full laboratory equipment, and maintained in connection with Christ Hospital for the benefit of suffering humanity in general and the citizens of Cincinnati in particular.

"I shall arrange for an adequate maintenance of this institute of medical research so that those in charge of the hospital may have ample funds to secure the best possible scientists as directors of medical research in the various fields of investigation, which I hope will lead to such discoveries in the science of medicine and healing, both preventative and curative, as will be a blessing to mankind."

In commenting upon the gift Dr. A. C. Bachmeyer, superintendent, Cincinnati General Hospital, Cincinnati, said: "It is an outstanding contribution, not only to Cincinnati but to medical science. Laboratories manned by scientific investigators have solved many problems and saved many lives. It will give the opportunity to noted scientists to devote their full time to the study of those diseases as yet uncontrolled by human ingenuity and those bacilli whose extermination the world still awaits, with particular emphasis on the annihilation of the deadly bacillus streptococcus. It is my hope that such scientists as will be appointed to wage lifelong battles against virulent disease will be provided with laboratories and all other equipment and human aid which will be needed to make this crusade take a place among those world renowned endeavors that have been instituted at the Johns Hopkins and Rockefeller Foundations."

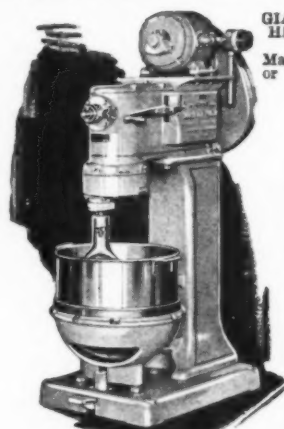
The executive manager of Christ Hospital, Dr. Frank C. English, reports the recent building fund campaign for the hospital as one of unusual character.

Eastman Donates Funds for
London Dental Clinic

The gift of \$1,500,000 made recently by George Eastman for the establishment of a dental clinic in London, England, will provide fifty chairs in the main infirmary, seven chairs in the orthodontia department, and twenty-five beds for tonsil, adenoid, and cleft-palate operations. It is said that there is inadequate provision for such cases in London which this equipment will supply.

Century (Giant) Mixers

Four Sizes

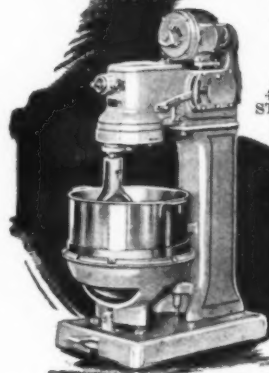


GIANT 4-SPEED
HEAVY DUTY
MIXER
May be had with
or without steam
jacket

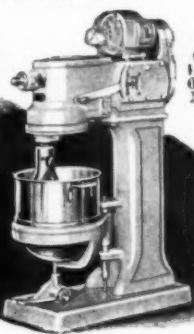
In Your Kitchen Use the Giant Mixer For:

Beating eggs
Cold slaw
Cream sauces
Croquettes
Crumbling bread
Custard
Dessert sauces
Dumplings
Fish cakes
Fruit juices, jellies and jams
Fritters
Gravy stock
Griddle cakes
Grinding coffee and spices
Grinding meats
Hash
Heavy sauces and creams
Ice cream
Jellied meats and poultry
Mashed Potatoes

Mash turnip, squash, pumpkin
Mayonnaise and dressings
Meat loafs
Mustard
Peanut butter and nut pastes
Pie fillers
Puddings
Purees
Rubbing up cheese
Salads
Sausage and hamburger
Slicing fruits
Slicing vegetables
Stuffing for vegetables and fruit
Soup stock
Straining soups
Sweet potato pies or puddings
Waffles
Whipped cream
Omelets



GIANT
4-SPEED
STANDARD
MIXER



GIANT
1-SPEED
6-36 QT.
MIXER



GIANT
15 QT.
MIXER

A Century equipped kitchen sets a new standard of efficient operation. Where hand work costs you dollars—a Century costs only pennies. Where hand work requires hours—a Century needs only minutes. Where hand work is wasteful of perfectly good materials—a Century saves every shred. Where hand work is unsanitary—a Century is always the perfection of cleanliness.

One Century does more work than ten skilled hands—does it hour after hour—changes from one job to another with utmost simplicity and ease—when operating it needs little supervision, releasing the attendant for other necessary duties. One large cake bakery uses over 70 Century Mixers.

An investment in a Century mechanical helper brings rich dividends in labor and time saved, in faster and better production with more ease and satisfaction.

Write for bulletin giving full description of the size Century mixer which best fits your needs.

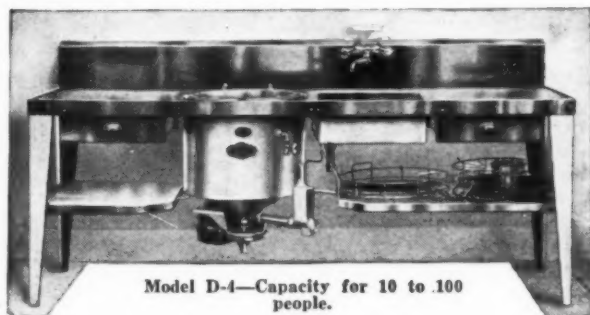
The Century Machine Co.

4426 Marburg Ave., Oakley, Cincinnati, Ohio

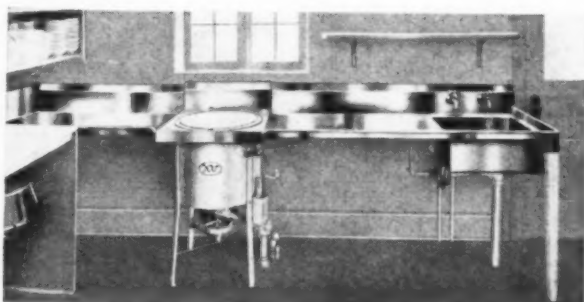
SYRACUSE



DISHWASHING EQUIPMENT



Model D-4—Capacity for 10 to 100 people.



D-1 with special tables and a sink, handling meals for 75 people.



Special Syracuse K.U. Dishwashing Equipment comprising dishwasher and special arrangement of stainless steel drain-boards and tables.

New Sanitation in Small Kitchens

A SERIOUS problem in every hospital is to be sure of sanitation in dishwashing. Syracuse K. U. Dishwashing Equipments have proven themselves in hundreds of hospitals, both in standard units and in special combinations of dishwasher and work-tables, to be best adapted to restricted space. Repeat orders after trial orders best express this satisfaction.

For new work or for replacement, let us propose stock units or special equipment that will prove most economical. Use the coupon. SYRACUSE, K.U. CORPORATION, Dept. C, 246 Walton St., Syracuse, N. Y.

SYRACUSE K.U. CORPORATION,
Dept. C, 246 Walton St., Syracuse, N. Y.

Without obligation, please send printed matter describing Syracuse K. U. Dishwashing Equipment.

Name

Institution

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HOSPITAL FOR JOINT DISEASES, NEW YORK CITY

A notable installation of

BRUNSWICK-KROESCHELL REFRIGERATION

To the Modern Hospital refrigeration is a most important problem. We have solved this problem, during our more than thirty years of continuous experience, for so many hospitals that the Brunswick-Kroeschell system of mechanical refrigeration has gained for itself wide acceptance as the preferred refrigerating system. Let us solve your refrigerating problems for you.

A copy of our 1928 Hospital Bulletin is yours for the asking; write for it now.

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Refrigerating & Ice Making Machinery
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BRANCHES, AGENTS AND SERVICE IN PRINCIPAL CITIES



BRADY LIGHTS have won approbation throughout the hospital field where their unique scientific features have met long-felt wants. Models of Brady Daylight lamps are available for every sort of clinical, diagnostic or operating room purpose. The one illustrated is typical of Brady superiority. Offers 500 watts of clear, penetrating daylight concentrated on the desired field of vision, and in addition an auxiliary heavy duty Willard storage unit for emergency use should regular current fail from any cause. Ask your local dealer for a test in your hospital.

Illustrated catalog on request

BRADY MFG. CO.
Detroit, Mich.

Ethical Surgical Supply Dealers
Are Our Representatives.

BRADY
LITE
PORTABLE
LAMP

MODEL 920

More Room for Private Patients at Mount Sinai

When the new nurses' home of Mount Sinai Hospital, New York, is opened, the old private pavilion which has been used by the nurses as an annex to the present home, will be adapted to the needs of semi-private patients, making it possible to accommodate 124 patients in that classification, says the *Trained Nurse and Hospital Review*.

Out of the 650 beds which the hospital now commands, only 155 are now in the private or semi-private class. When the 100 additional semi-private beds are made available, the hospital's 750 beds will be distributed as follows: private rooms, 131; semi-private beds, 134; ward beds, 495.

Report of Hospital for the Mentally Ill

Admissions to the Columbus State Hospital, Columbus, Ohio, increased about 10 per cent within the past year, Dr. William H. Pritchard, superintendent of the hospital, has announced in his annual report.

There were received on first commitments, 523 patients, on recommitment 98 patients and by transfer, 4 patients, or a total of 625, which represents 66 more than were received last year.

Work to Start in Spring on University Hospital Addition

Work will be started in the Spring on a three-unit addition to the University of Minnesota Hospital, Minneapolis, Minn., to cost \$890,000, it has been announced.

The expansion program includes a unit for the hospitalization of crippled children under medical school supervision, as provided for in the \$2,000,000 gift of William Henry Eustis.

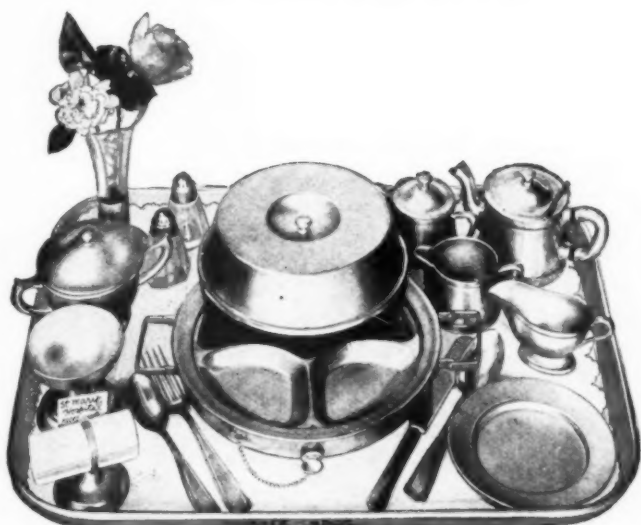
Besides the Eustis hospitalization unit, the new addition will include the student health service and outpatient or dispensary units. This will be built as a west wing, paralleling the cancer institute and eye, ear, nose and throat clinic on the east side.

A \$28,000 roofhouse over the front part, to house hospital interns will be one of the addition's features. At present the university dispensary is housed in cramped quarters in Millard Hall basement, three blocks away from the hospital.

How Bushwick Hospital Greet Each Patient at Christmas

At the Bushwick Hospital, Brooklyn, N. Y., of which John H. Olsen is the superintendent, each patient who is in the hospital at the Christmas season has the privilege of inviting a guest to take dinner with him as the guest of the hospital. The hospital also offers a Christmas greeting to all its patients in the form of an attractive card bearing the following message: "Christmas Greetings and Best Wishes for Your Health, Happiness and Prosperity throughout the coming year."

THORNER'S Silver Service



Thorner's Silver Service is made of 18% Nickel Silver with a quadruple silver plate. Wears a lifetime. Replacement through breakage is forever eliminated. It is never affected by wear or polishing.

Illustration features Thorner's Improved Three Compartment Hot Water Plate. Tea Set with reinforced bands, hard metal hinges, Silver Soldered and one-piece unbreakable bottom. Covered Soup Cup with Silver Soldered handles. Sherbet Dish, Gravy Boat, Individual Napkin Ring and Tray Marker, Bud Vase, Salt and Pepper Shakers and Superior Grade Sectional Plate Flatware.

THORNER BROTHERS

*Importers and Manufacturers of
Hospital and Surgical Supplies*

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NEW YORK CITY

Prevention— an aim of modern medicine

MODERN medicine helps to preserve health and forestall disease. Prevents as well as relieves. Progress in preventive medicine has added years to life's span.

Kellogg's ALL-BRAN is a staunch supporter of modern preventive practice. When eaten regularly with milk or cream, with fruits or honey, ALL-BRAN benefits the entire system. The intestinal tract receives the bulk so helpful to proper elimination. Kellogg's ALL-BRAN prevents as well as relieves constipation. And, of course, danger of disease is lessened as waste material is eliminated.

Kellogg's ALL-BRAN is cooked and krumbled by a special process. Pleasing in its nut-like flavor. A "prescription" to delight young and old. ALL-BRAN is 100% bran. It produces results part-bran products can't equal.

Made by Kellogg in Battle Creek. Sold by all grocers. Served everywhere.

Kellogg's
ALL-BRAN



CUT a little bigger than seems necessary, made a little longer, with sleeves two inches longer than regular, and using 50 yards of material to the dozen gowns — to the end that you may have a comfortable fitting, long wearing gown. Prices are surprisingly reasonable for a quality product. One of a complete line of hospital garments. Operating gown illustrated is No. F-316-C made from stout Kenwood cloth in sizes 38 to 48. Price \$19.00 per dozen. We suggest a trial order.

WILL ROSS, Inc.
Wholesale Hospital Supplies
Milwaukee, Wisconsin

Distributors at wholesale of a complete line of hospital supplies

NEWS OF THE HOSPITALS

Alabama

Because of the congested condition of Speir's Infirmary Greenville, contract has been let for a five-room addition to the hospital and for other improvements to the institution which will cost approximately \$12,500.

Florida

The new Tampa Municipal Hospital, formerly known as the Gordon Kellar Memorial Hospital, Tampa, has recently been opened. It is a general hospital, completely equipped with all necessary departments including a nurses' home, and has a capacity of 250 beds. The total cost of the building and equipment was \$1,675,000.

Illinois

The new St. Therese Hospital is under construction at Waukegan and will be in charge of the Missionary Sisters, Servants of the Holy Ghost. It is to have 125 beds for adults as well as a large children's department and will be modern in every respect. The center structure will be nine stories, with wings on each side of seven stories each. Waukegan was chosen as the site for this institution after a survey which showed a shortage of hospital beds in Lake County.

A program of expansion to increase the capacity from 100 to 120 beds, has been announced by the Norbury Sanatorium, Jacksonville. The proposed addition will cost about \$100,000.

Iowa

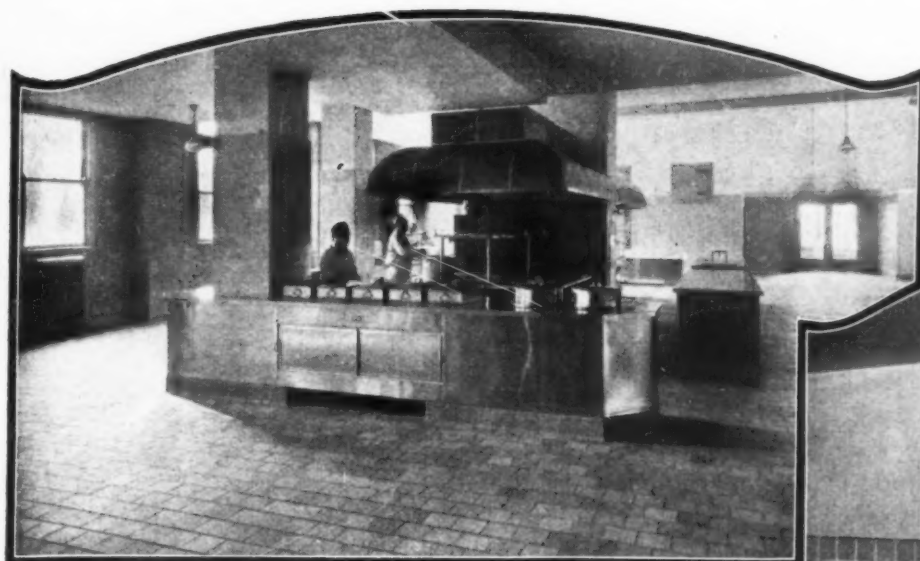
Construction for a new nurses' home for St. Luke's Hospital, Davenport, will be under way soon, as a result of a gift of \$125,000 for that purpose from Col. and Mrs. George Watson French of that city.

Kentucky

Plans are being worked out for a modern, fireproof hospital for Pineville as a result of a meeting of the physicians of that community. It is to be a fifty-bed institution, according to the present plans, and will be a community project open to all local physicians.

Louisiana

Contracts have been awarded for the construction of the first unit of the new Presbyterian Hospital, New Orleans. It will be of reinforced concrete, five stories high, and will be known as the James M. Batchelor Building in honor of Dr. Batchelor, surgeon-in-chief of the hospital. The first unit will be the medical and surgical building and upon its completion, construction of a nurses' home and a ten-story administration building will begin. The institution will be a national hospital of the Presbyterian church, and is financed by the church.



Kitchen, Good Samaritan Hospital, Cincinnati, Ohio. Architect, Gustave Drach, Cincinnati, Ohio. General Contractor, The Ferro Concrete Construction Co., Cincinnati, Ohio. Tile Contractor, Cassini Mosaic & Tile Co., Cincinnati, Ohio.



Corridors, Maternity Hospital, Cleveland, Ohio. Architect, Abram Garfield, Cleveland, Ohio. Tile Contractors, The Wadsworth-Addison Co., Cleveland, Ohio.

Extreme Cleanliness for Corridors, Kitchens, Lavatories and Laboratories

AN essential of extreme cleanliness in hospitals is a floor and wall material which will not "pit or pock," craze or crack; thereby allowing dirt to work into these openings. It is here that the unusual durability of Romany Quarry Tiles becomes of extreme importance.

Due to the care used in eliminating clay impurities, these tiles have a flint-hard surface which will not develop dirt-collecting crevices even under severe hospital service conditions. As a result, it is an easy matter

to keep the floors and walls of corridors, kitchens, lavatories and laboratories spotlessly clean and sanitary when Romany Quarry Tiles are used for these surfaces.

In addition, the warm, bright colors of Romany Quarry Tiles lend a cheerfulness to the building not otherwise obtainable. This is much to be desired. Low in first cost, unexcelled for durability and ease of cleaning, bright, beautiful, Romany Quarry Tiles offer the greatest of values in hospital construction.

Romany Quarry Tiles are made in three plain colors—red, grey, brown—and in a rich medley of golden shades which range from dark russets through the tans to pale greens—the Romany Rainbow Tiles.

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ROMANY QUARRY ■ TILES

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Need Money for a New Building?

EVERY hospital has in its executive positions trained specialists. Such persons accomplish more in less time than others.

The same principle applies to raising money. Specialists raise more money most economically.

Hedrick, Marts & Lundy have had experience raising money in many cities from the Atlantic to the Pacific. They have obtained large sums for new hospitals, for additions to old equipment—or to clear off accumulated debt.

Campaigns undertaken anywhere. All the many details are carefully directed by our experienced staff.

Tell us your plans.

"Financing Philanthropy" quarterly paper, free on request.

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Norinkle Rubber Sheets

Economy—Durability

..... I am sending you a NO-RINKLE RUBBER SHEET which has been in continuous use on one of our ward beds since the early part of June, 1922...This sheet, which was taken at random from those in use in the Hospital, testifies to the excellent quality of the materials you use.

JAMES U. NORRIS, Supt.
Woman's Hospital in the State of New York
NEW YORK CITY

Write for Samples and Catalog!

HENRY L. KAUFMANN & CO.

301 Congress St., Boston, Mass.

Massachusetts

The Holy Ghost Hospital for Incurables, Cambridge, has recently completed a new wing, one floor of which was given by the Catholic Women's Guild. A check for \$5,500 was also given by the Guild toward the balance of the wing.

A drive for \$600,000 for a new solarium for the roof of the Robert Bent Brigham Hospital, Boston, and for a new building for incurable patients, is being carried on by the hospital.

The new building connecting the out-patient departments of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary, Boston, was recently opened.

Minnesota

A new building is under construction for the Ramsey County Children's Preventorium, Lake Owosso, which will be completed and opened this winter. It is being constructed at a cost of \$100,000.

The new U. S. Veterans' Hospital, Fort Snelling, opened this summer, has treated nearly 1,500 patients and there are over 500 patients undergoing treatment at the present time.

Mississippi

Contracts have been let for the construction of eight buildings for the new hospital for the insane at Whitfield. They will include power house, infirmaries for men and women, occupational therapy buildings for men and women and narcotic building. Construction will cost approximately \$500,000.

Missouri

The new St. Louis Maternity Hospital of the Washington University, St. Louis, was recently opened. It contains 104 beds, sixty of which are free or part-pay, research laboratories and other departments making it a thoroughly modern maternity unit. It was erected and equipped at a cost of \$850,000.

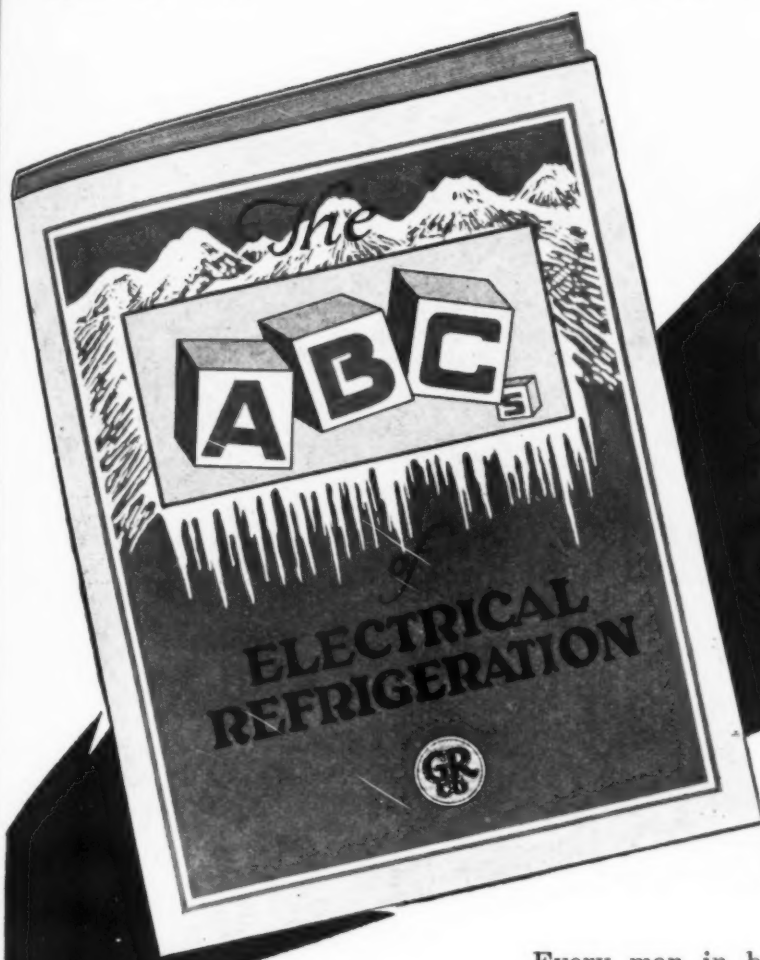
New York

The new Veterans' Memorial Hospital, Kings Park, Long Island, was recently dedicated. The hospital is two stories high, and of fireproof construction. It was erected at a cost of \$3,000,000 and has accommodations for 800 patients and housing facilities for the entire personnel and staff.

The Memorial Hospital, New York, one of the leading institutions for research, announces a gift of \$25,000 from Lucius N. Littauer, Gloversville, N. Y., for special research in chemotherapy, and two smaller gifts for study and research work from Mrs. S. M. Gibbons and Daniel Guggenheim, both of New York.

The New York State Psychiatric Institute and Hospital under construction at Broadway and One Hundred and Sixty-Eighth Street, New York, is to be a twenty-story building for the treatment and study of mental disease. The first ten floors will have a capacity of 200 beds and the upper ten floors will be for the institute. The purpose of this institution is research and treatment of mental diseases, but only cases of special interest to science will be admitted. One floor will be devoted to children and will have a school and workroom.

Plans are completed and work has begun on the addition to the medical wing of the Monroe County Tuberculosis Sanatorium, Rochester. The addition will contain dispensary, laboratory, morgue, dentists' room, examining room, treatment room and operating room.

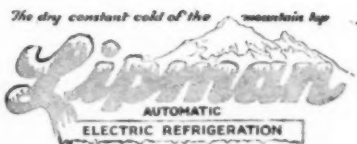


**FREE
BOOK**

on

**ELECTRIC
Refrigeration**

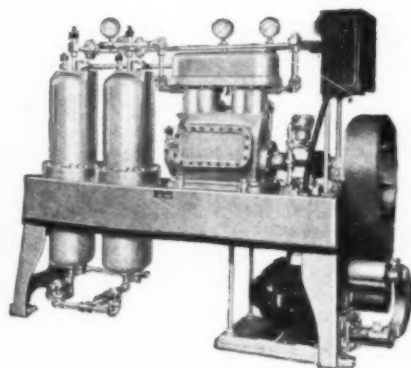
Every man in business should know the advantages of Electric Refrigeration. Some day you'll buy such equipment—that's certain. "Certain," because of its economy, cleanliness, and efficiency—"certain," because your competitors will have it—"certain," because once you learn the facts, you'll be anxious to take advantage of this means of doing a far better job at one-third to one-half the former cost. Whether you are ready to buy today—a year from today, or even later—it'll pay you to know the facts *now* so that you'll be posted when you are ready to buy. Send for the "ABC's" today!



General Refrigeration Company

Beloit, Wisconsin, U.S.A.

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No Obligation**



GENERAL REFRIGERATION COMPANY, Beloit, Wis. Dept. A7

Please send copy of FREE book.

My Name

Superintendent

Hospital

Street

City and State.....

THE DRY, CONSTANT COLD OF THE MOUNTAIN TOP !

Baker Rewireable Screens

—“built to outlast the windows”



BAKER EQUIPT
U. S. VETERANS'
HOSPITALS

Atlanta, Ga.
Ft. Thomas, Ky.
Jefferson Bks., Mo.
Tuskegee, Ala.
Philadelphia, Pa.

YES, as long as there's a window in your building, its Baker Screen will look well and work smoothly! The frames of Baker Screens are cold-rolled from heavy, basic steel, galvanized to resist rust—they never stick in channels. Their fine - mesh, non - rusting Jersey Copper Wire Cloth is held permanently taut by a $\frac{1}{4}$ " steel rod encircling the entire frame—can be re-wired by your own men. The “only” screens for your building!

Write for specifications
and prices

THE W. J. BAKER CO.

1029 Saratoga St.

Newport, Ky.

MONASH

TYPE “C” THERMOSTATIC ELEMENTS

Transform old defective or obsolete type radiator trap bodies into modern efficient traps which will meet all hospital requirements.

NOISELESS IN ACTION

THEY SAVE FUEL



Don't throw away your troublesome traps—Reconstruct them with Monash Thermostatic Elements.

**TEN-YEAR
GUARANTEE**

Trap bodies of any make, when reconstructed with Monash Thermostatic Elements, carry a ten-year guarantee. They can be installed without removing the body of the trap from the radiator connections. These astonishing facts are worthy of your investigation.

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MONASH-YOUNKER CO., Inc.

Established 1899

Factory and General Office

553-7 W. Monroe St.

CHICAGO

Ohio

Plans are being drawn for the new Youngstown Hospital, Youngstown, construction of which is expected to begin in the spring. A bequest of \$500,000 from Lucy Buechner in memory of her father and brother, Youngstown physicians, will be the beginning of the fund, which the building committee hopes to increase to \$1,500,000 before its completion. The building is to have 150 private rooms and fifty additional rooms for the maternity department according to the present plans. Albert Kahn, Detroit, is the architect.

A gift of \$10,000 for the furnishing of new rooms was recently received by the Good Samaritan Hospital, Cincinnati, from Mr. and Mrs. William E. Fox.

Cincinnati's new Children's Hospital, which was recently completed and opened, was constructed at a cost of \$1,250,000.

The Shelby Memorial Hospital, Shelby, recently received a gift of \$5,000 from the estate of the late Mrs. Harriet Stephenson. This brings the fund raised by the hospital for the equipment of rooms, to approximately \$50,000.

Pennsylvania

A campaign will be conducted by the St. Francis Hospital, Pittsburgh, for funds for the construction of a \$1,500,000 addition to bring the capacity of the institution up to 850 beds. This will be the first public appeal made by this hospital in its sixty-one years of service.

Construction is under way for the new buildings for the Philadelphia Home for Incurables, Philadelphia, to be erected at a cost of \$1,000,000. This hospital has been open for the past fifty years and during that time has provided a home for 6,000 incurables.

Tennessee

Construction is under way on the addition to U. S. Veterans' Hospital No. 88, Memphis. The new building will contain dining hall, physiotherapy, occupational therapy and hydrotherapy departments, as well as living quarters for hospital attendants. The cost will be approximately \$80,000.

A new three-unit hospital on the cottage bungalow style is being erected at Johnson City by Dr. W. C. Goss. When completed the institution will accommodate forty patients and will be completely equipped, including x-ray facilities.

Wisconsin

The first unit of the New Methodist Hospital, recently opened at Madison, contains 125 beds and is completely equipped with operating rooms, special rooms for eye, ear, nose, throat and dental work, and x-ray and general laboratories. It is a seven-story building constructed along Italian architectural lines and cost about \$750,000 for the building, grounds and equipment. Three additional units are planned to be built in the future to complete this institution.

Construction has begun on the \$2,000,000 hospital to be erected at Kenosha by the Sisters of St. Dominic. The first unit, to be constructed at a cost of \$150,000, is under way and the remaining buildings will be constructed during the next thirty years. Schmidt, Garden and Erikson, Chicago, are the architects.

Foreign

Bogota, Colombia, South America, is to have a new \$500,000 hospital which was designed by Schmidt, Garden and Erikson, architects, Chicago. It will be built by Dr. Emanuel V. Pena, physician and surgeon of Bogota.